

County Borough



of Blackburn.

ANNUAL REPORT

UPON THE

Health of Blackburn

For the Year 1914,

BY

J. COOTE HIBBERT, M.D. (Lond.), D.P.H.,

MEDICAL OFFICER OF HEALTH, MEDICAL SUPERINTENDENT
TO THE INFECTIOUS DISEASES HOSPITALS, AND SCHOOL
MEDICAL OFFICER.

BLACKBURN:

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Corporation of Blackburn.

MEMBERS OF THE HEALTH COMMITTEE.

THE MAYOR (*Alderman William Thompson*).

ALDERMEN :

GARSDEN (<i>Chairman</i>).	WATSON.
FIELDING.	SHORROCK.
RAMSAY.	

COUNCILLORS :

STEPHENSON.	HEATLEY.
JOHNSON.	POLLARD.
BOLTON.	LEIGHTON.
JENKINS.	GREEVES (<i>Vice-Chairman</i>).
KEIGHLEY.	BATES.
HIGHAM.	WAREING.
HAMER.	BROWNLEE.
HALL.	

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The Local Government Board Tables, and the Classification of all Deaths in the Borough are appended to this Report.

Statistical Summary for 1914



Area of Borough	7,418 acres.
Population at Census, 1911	133,052
Estimated Population to Middle of 1914	134,323
Average Number of Persons per acre	18.1
Birth-Rate per 1,000 living	20.8
Death-Rate ,, (Crude)	14.9
,, (Standardised)	16.1
Infant Mortality per 1,000 Births	116.2
Total Occupied Houses at 1911 Census	30,648
Plans of New Dwelling-houses Passed	274
Rateable Value	£575,381

Staff of the Health Department.

Medical Officer of Health, School Medical Officer and Chief Executive Tuberculosis Officer.

J. COOTE HIBBERT, M.D. (Lond.), D.P.H.

Assistant Medical Officer of Health and Tuberculosis Officer.

A. J. EWING, M.A., M.B., Ch.B., D.P.H.

School Medical Inspector and Assistant to Medical Officer of Health.

W. A. B. YOUNG, M.D. (Vict.), D.P.H.

Veterinary Inspector and Chief Meat Inspector.

E. J. BURNDRED, M.R.C.V.S., D.V.H.

Assistant Meat Inspector.

*W. H. GOODMAN.

Chief Sanitary Inspector.

*JAMES GRAHAM.

Special Inspector for Food and Drugs, &c.

*O. H. WILLIAMS.

Special Inspector for Factories and Workshops.

*H. KENYON.

Special Inspector for Drainage Work.

*A. LEES.

District Inspectors.

*J. W. MARGINSON.

*W. WALNE.

*W. E. GREENWOOD.

*ERNEST SEFTON.

Lady Health Visitors.

Miss ST. STEPHENS. *Miss LOWE. *Miss LANGLEY. *Miss HIORNS.

Lady Inspectors of Midwives.

Miss ST. STEPHENS. Miss LOWE.

School Nurses.

*Miss BARTON. *Miss EVANS.

Chief Clerk.

THOMAS FOWLER.

Clerks.

I. PEMBERTON. T. PICKERING. J. HARGREAVES. W. ALTY.

Disinfectors.

J. W. JOHNSON. E. HODGSON. E. SHUTTLEWORTH.

*Holders of the Royal Sanitary Institute Certificates.

Public Health Office,

Blackburn,

June, 1915.

*To the Chairman and Members of the Health Committee
of the County Borough of Blackburn.*

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to submit to you, in accordance with the regulations of the Local Government Board, my second Annual Report on the Health and Sanitary Condition of the Borough, viz., that for the year ending December 31st, 1914.

The Report contains the Vital and Mortality Statistics, the measures adopted for the prevention of disease, and the work carried out by the Public Health Department generally.

I thank you for the kindly encouragement and support you have given me.

I am,

Mr. Chairman and Gentlemen,

Your obedient servant,

J. COOTE HIBBERT.

REPORT

OF THE

Medical Officer of Health

FOR 1914.

Blackburn is situated chiefly in the valley of the Blakewater, and to a much smaller extent in the valley of the Darwen.

The following are the heights above sea-level in various parts of the town :—

Town Hall	377 feet.
Revidge	715 „
Witton	318 „
Intack	483 „
Infirmery	402 „
Station	360 „
Fever Hospital	560 „

The rivers join on the western boundary of the Borough. On the north side of the Blakewater the land rises after the first few hundred yards rapidly from a height of about 300 feet to a height of 700 feet. To the south and west of the River Darwen there is also a fairly rapid rise from a height of 300 feet to 600 feet. The land between the two rivers has at first no great inclination, but towards the south-east it rises rapidly to a height of 650 feet. On the north side the gradients are as high in one or two instances as 1 in 10 and 1 in 10 or 12 are not uncommon. On the south side the

steepest slope is 1 in 10. The fall of the valley of the Blakewater is 86 feet in $2\frac{1}{4}$ miles, or 1 in 138. With few exceptions the falls in the town may be considered good. The deep strata underlying the town are principally the Lower Coal Measures or Gannister Beds. There is a narrow strip of Alluvium in the valley of the Darwen, and Millstone Grit (rock and shale) comes to the surface on the northern side of the Borough over a considerable area, and to a very small extent on the southern side. The Gannister Beds underlie nearly the whole of the town proper, and those parts which have Millstone Grit for their deep strata are chiefly agricultural land. With one or two small exceptions the deep strata are covered with drift beds. Throughout the greater part of the Borough the drift beds are principally composed of clay. There is, however, a considerable piece of land in the centre of the town covered with a good depth of pure sand. I cannot map it out correctly, but it includes the land on which the Town Hall, the Market House, the Parish Church, and the Railway Station are built. It extends northwards as far as Regent Street and Richmond Terrace. To the west it extends as a narrow elongated strip as far as Witton Stocks.

The sand varies considerably in its purity in different localities. In the neighbourhood of Church Street, Mincing Lane, Weir Street, Clayton Street, and King Street, it is of a clean reddish colour, and reaches, in some instances, to a depth of 15 to 20 feet, or possibly more. In the neighbourhood of Galligreaves Street and between Galligreaves Street and Whalley Banks, the sand was originally overlaid with a varying thickness of clay, but this was mostly removed before the land was built upon. To the south of Bank Top and Redlam the subsoil is composed mostly of a mixture of sand, gravel, and clay, whilst to the north of Bank Top and Redlam, as far as the River Blakewater, the subsoil is much purer sand. Over the remainder of the town the drift beds are mostly clay, or clay and gravel.

Millstone Grit comes to the surface along Revidge Road, and to some extent on both sides of the road, but principally to the south. The deep strata are of interest chiefly from the water which is derived from them. The superficial strata or drift beds which form the subsoil are of great importance. Upon its character the dryness of the locality depends to a great extent, and frequently the dryness of the houses built upon it. It has also a very distinct bearing upon all diseases which are due to soil pollution, and also upon those diseases which are due to damp and cold.

POPULATION.

The population of the County Borough of Blackburn, taken at the Census of 1911, was 133,052, of which 61,788 were males and 71,264 females : the population at the 1901 Census was 129,216.

Assuming that the population has continued to increase since 1911 at the same average rate as during the intercensal period 1901-1911, the population for the middle of 1914 is estimated to be 134,323.

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Table I.

YEAR.	Population at Census.	BIRTHS.	DEATHS.	Natural Increase in 10 year periods, also expressed as percentage of population.	Excess of Immigration over Emigration in 10 year periods, also expressed as a percentage of population.	Total Increase in 10 year periods, also expressed as a percent- age of the population.
1841	36,629		955			
1842			945			
1843			1220			
1844			1143			
1845			1124			
1846			1488			
1847			1445			
1848			1214			
1849			1125			
1850			1315			
1851	46,536	2035	1264			
1852		2000	1697			
1853		2130	1758			
1854		2241	1320			
1855		2181	1781	6859	9731	16590
1856		2324	1330	14.7 %	20.9 %	35.6 %
1857		2372	1824			
1858		2277	1847			
1859		2479	1547			
1860		2675	1487			
1861	63,126	2773	1774			
1862		2754	1815			
1863		2568	1440			
1864		2730	1746			
1865		2737	1881	9211	4002	13213
1866		2775	2146	14.5 %	6.3 %	20.9 %
1867		2915	1867			
1868		3155	1961			
1869		3007	2337			
1870		3082	2318			
1871	76,339	3166	2033			
1872		3463	2050			
1873		3227	2462			
1874		3305	2432			
1875		3412	2200			
1876		3425	2435	10820	16855	27675*
1877		3518	2134	14.1 %	less	less
1878		3456	2742		12056 =	12056 =
1879		3418	2174		4799 or	15619 or
1880		3386	2294		6.2 %	20.4 %

* The population of the added portions of Witton, Livesey, Lower Darwen and Little Harwood are here deducted.

Table I—Continued.

YEAR.	Population at Census.	BIRTHS.	DEATHS.	Natural Increase in 10 year periods, also expressed as percentage of population.	Excess of Immigration over Emigration in 10 year periods, also expressed as a percentage of population.	Total Increase in 10 year periods, also expressed as a per- centage of the population.
1881	104,014	3919	2431			
1882		3918	2665			
1883		4305	2660			
1884		4132	2663			
1885		4000	2452			
1886		4004	2863	13186	2864	16050
1887		4164	2974	12.6 %	2.7 %	15.4%
1888		4111	2865			
1889		4150	3077			
1890		4015	2882			
1891	120,064	4085	3116			
1892		3883	2551			
1893		3822	2793			
1894		3621	2173			
1895		3899	3084	10853	-3291	7562
1896		3552	2269	9.04 %	-2.7%	6.3%
1897		3629	2529			
1898		3662	2439			
1899		3643	2607			
1900		3438	2820			
1901	129,216	3386	2495			
1902		3357	2247			
1903		3304	2069			
1904		3100	2274			
1905		3193	2183	10514	6666	3848
1906		3418	2193	8.13%	5.15%/o	2.98%/o
1907		3348	2293			
1908		3415	2157			
1909		3139	2234			
1910		2948	1949			
1911	133,052	2857	2149			
1912		2741	1928			
1913		2915	2119			
1914		2805	2006			

Between 1871 and 1881 the following additions were made to the Borough. In July, 1877: Livesey (part of) 4449; Witton (part of) 4180 Little Harwood (part of) 33. In July, 1879, Lower Darwen (part of) 2712 Little Harwood (part of) 682.

In November, 1901, parts of Witton and Livesey were added to the Borough, and the Registrar General has added these figures to those obtained at the 1901 Census.

TABLE II.

Age Periods in Years.	Population estimated to the middle of 1914.	
	M	F
Under 5	6305	6108
5 — 15	11434	11496
15 — 25	11251	13599
25 — 35	11149	13452
35 — 45	8787	10363
45 — 55	7007	8381
55 — 65	4194	5013
65 — 75	1881	2749
75 and upwards	450	704
Total.....	62458	71865

MARRIAGES.

The number of marriages solemnised within the County Borough of Blackburn during 1914 was 1,179, as compared with 1,182 during 1913.

Of these, 612 took place in the Established Churches, 565 in the Nonconformist places of worship and at the Register Office, and 2 at the Jewish Synagogue.

The rate of persons married per 1,000 of the population was 17.5.

The Marriage Rates for the previous five years were as follow :—

1909	.....	17.4
1910	.....	17.4
1911	.....	18.4
1912	.....	18.1
1913	.....	17.6

BIRTHS.

The number of births registered during the year in Blackburn was 2,814, of which 1,389 were males and 1,425 were females.

After correction according to instructions from the Registrar-General, viz. : that 10 of these births were to be allotted to other districts, and 1, which occurred in another district, was to be included in the total for Blackburn, the net births for the year were 2,805, which is equal to a birth-rate of 20.8 per 1,000 living.

The birth-rates per 1,000 living during 1914 for England and Wales were as follows :—

England and Wales	.....	23.6
97 Great Towns (including London)	....	24.9
145 Smaller Towns	.....	23.6
England and Wales (less the 242 towns)		21.9
London	.....	24.6

Table III.

**Notification of Births under the Notification
of Births Act.**

Month	Total Births Notified	By Medical Men	By Midwives	By Parents	By Others	Males	Females	Sex not stated
January ...	232	34	158	40	...	108	119	5
February ...	208	46	134	28	...	103	102	3
March ...	230	47	156	27	...	108	118	4
April ...	243	51	166	26	...	125	113	5
May ...	240	34	178	28	...	127	106	7
June ...	239	41	172	25	1	114	120	5
July ...	214	40	149	25	...	109	100	5
August ...	226	53	156	16	1	119	99	8
September ...	228	40	151	37	...	108	119	1
October ...	296	54	161	80	1	148	143	5
November ...	193	43	132	16	2	95	96	2
December ...	213	47	149	15	2	96	114	3
TOTAL ...	2762	530	1862	363	7	1360	1349	53

ILLEGITIMATE BIRTHS.

Of the 2,805 births, 128 (or 4.5 per cent.) were illegitimate.

The percentages for previous years were as follow :—

1909	4.8 per cent.
1910	4.3 „ „
1911	4.4 „ „
1912	5.0 „ „
1913	4.3 „ „

Of the 128 illegitimate births, 56 were males and 72 females.

17 of these births occurred in the Union Workhouse.

As in previous years, inquiries have been made respecting these illegitimate births. 114 cases were investigated, and the following is a summary of the results obtained :—

As to the occupation of the mothers :—

43	were Weavers.
16	„ Winders.
12	„ Ring Spinners.
9	„ Servants.
5	„ Cardroom Hands.
3	„ Rovers (Cotton).
3	„ Firelight Makers.
23	„ engaged in other occupations.

There were in attendance at birth :—

Medical Men	in 23 cases.
Midwives	in 74 „
Medical Men and Midwives	in 16 „
Medical Man and Handy-women ...	in 1 „

Table IV.

Illegitimate Children.

Ward.	No. of Births.	Total number of deaths	Deaths under 1 year of age.
St. Stephen's	6	2	...
Trinity.....	7	3	3
St. Michael's.....	9	3	3
St. John's	10	7	5
St. Silas'.....	...	...	...
St. Paul's	15	1	1
St. Peter's	12	4	4
St. Mary's	24	6	5
St. Matthew's	8	2	1
St. Thomas'	14	4	2
Park.....	5	6	4
St. Luke's	5	1	...
St. Mark's	6	1	1
St. Andrew's	7	1	1
Borough	128	41	30

The percentage of deaths of illegitimate children under one year of age was 23·4 as compared with 27·5 in 1913.

STILLBORN CHILDREN.

The following are the numbers of Stillborn Children brought to the Cemetery during the year 1914, and reported to me by the Cemetery Registrar :—

Jan.	Feb.	Mar.	Apl.	May	June
11	14	9	13	9	21
July	Aug.	Sept.	Oct.	Nov.	Dec.
13	14	13	7	11	12

Total : 147.

The figures include miscarriages.

The number of Stillbirths notified by Doctors and Midwives during the year in connection with the Notification of Births Act, was 121.

Of these 121 Stillbirths, 73 were males and 48 were females. There were 6 illegitimate Stillbirths.

Visits were paid to the houses in 116 cases, and particulars obtained in 113 cases.

In 25 cases a Doctor attended the confinement.

In 40 cases a Midwife attended the confinement.

In 48 cases both a Doctor and Midwife attended the confinement.

As to the duration of pregnancy :—

69 of the mothers were in the 9th month of pregnancy.

15	„	„	8th	„	„
28	„	„	7th	„	„
1	„	was	6th	„	„

Regarding the presentations, there were 71 vertex, 10 feet, 9 breech, 7 transverse, 1 face, and 1 shoulder. In 14 cases information as to the presentation could not be obtained.

As to the occupation of the mothers, 78 were employed in the cotton industry or were otherwise employed away from home, and 35 were engaged in house duties.

With regard to the length of time during which the mothers stayed away from work before confinement :—

3 were at work on the same day as the confinement.

6 stayed away from work 1 day previous to confinement.

3	„	„	2 days	„
4	„	„	1 week	„
1	„	„	2 weeks	„
6	„	„	5 weeks	„
3	„	„	6 weeks	„
1	„	„	7 weeks	„
5	„	„	1 month	„
15	„	„	2 months	„
8	„	„	3 months	„
23	„	„	over 3 months	„

Table V.

Notification of Stillbirths received under the
Notification of Births Act

Month			Total Stillbirths Notified	By Medi- cal Men	By Midwives	By Parents	Males	Females	Sex not stated
January	...	...	8	4	4	...	5	3	...
February	...	...	8	3	5	...	6	2	...
March	...	...	11	4	5	2	4	7	...
April	...	...	8	1	7	...	4	4	...
May...	...	...	8	2	6	...	4	4	...
June...	...	...	15	6	9	...	7	8	...
July ...	...	...	12	4	8	...	7	5	...
August	...	...	11	3	7	1	8	3	...
September	...	...	13	5	8	...	8	5	...
October	...	...	9	6	3	...	6	3	...
November	...	...	8	...	8	...	7	1	...
December	...	...	10	4	6	...	7	3	...
Totals	...	...	121	42	76	3	73	48	...

TABLE VI.

Stillbirths Notified.

(Notification of Births Act).

Ward.	1910	1911	1912	1913	1914
St. Stephen's	6	17	8	14	9
Trinity	15	8	13	17	12
St. Michael's	9	8	8	18	8
St. John's.....	13	6	4	9	6
St. Silas'	4	2	6	1	5
St. Paul's	10	5	17	3	13
St. Peter's.....	5	7	7	6	6
St. Mary's ...	7	7	3	11	9
St. Matthew's	5	12	9	14	14
St. Thomas'*	14	8	20	13	7
Park	11	15	13	12	8
St. Luke's ...	7	7	11	6	15
St. Mark's ...	8	11	8	7	2
St. Andrew's	17	8	11	9	7
Total ..	131	121	138	140	121

* The Blackburn Union Workhouse is in this Ward.

DEATHS.

In the following Tables, VII. to XVI., will be found classification of deaths in Blackburn during 1914, according to age, disease, and locality. The chief rates for other large towns are also given.

During the year there were 2,006 deaths, of which 1,003 were males and 1,003 females.

Corrections have been made for those persons who belonged to outside districts and who died in Blackburn, and for Blackburn residents who died in outside districts.

The total number of non-residents who died in institutions, etc., in this Borough was 141 as compared with 147 during 1913.

These non-residents came from the following districts, viz. : Darwen, 51; Oswaldtwistle, 15; Great Harwood, 10; Church, 7; Accrington, 6; Clitheroe, 6; Rishton, 5; Haslingden, 5; Wiswell, 3; Clayton-le-Moors, 3; Padiham, 2; Billington, 2; Wilpshire, 2; Tockholes, Slaidburn, Withnell, Hoghton, Cherry Tree, Yate and Pickup Bank, Aspull, Samlesbury, Aighton, Rawtenstall, Burnley, Bolton-by-Bowland, Eccleshill, Langho, Ramsgreave, Pleasington, Osbaldeston, New Brighton, Bradford, Shrewsbury, Oldham, Earby, Lancaster, and St. Annes-on-the-Sea, 1 each.

The number of deaths amongst Blackburn residents occurring in districts outside was 67, as compared with 61 during 1913.

These deaths occurred at the following places :—Lancaster Asylum, 20; Whittingham Asylum, 8; Prestwich Asylum, 4; Winwick Asylum, 3; County Hospital, Kendal, 2; private residences, Blackpool, 2; Workhouse, Burnley, 2; private residences, Manchester, 2; at various places, chiefly in the neighbourhood, 24.

The resulting crude death-rate was 14.9 per 1,000.

The Registrar-General makes use of what is called the "standardised death-rate" for comparing together the death-rates of towns differently constituted as regards the age and sex of their populations. As mortality is much the highest in infancy and in old age, and higher in the male than in the female, the greater the proportion of young and middle-aged adults and of women in any population the more favourable are the conditions in these respects for a low death-rate; and consequently when comparing the rate of such population with that of another less favourably constituted in this way, some allowance must be made for the advantage the former population has over the latter.

As Blackburn is favourably constituted as regards the age and sex of its population, the crude death-rate must be multiplied by a factor greater than unity, and the Registrar-General has calculated the factor for this Borough to be 1.0849.

The standardised death-rate for Blackburn is, therefore, 14.9×1.0849 or 16.1.

The following were the Crude and Standardised Death-Rates per 1,000 living for England and Wales and for Blackburn during 1914:—

	Crude. Standardised.	
England and Wales	13.9	13.6
97 Great Towns (including London).	14.6	14.9
145 Smaller Towns	12.8	12.9
England & Wales (less the 242 towns)	13.3	12.2
Blackburn	14.9	16.1

The Blackburn death-rate for 1914 was therefore somewhat lower than that of the previous year (15.8).

In comparing the rate for Blackburn with that of the other great towns of England and Wales the standardised rate must be used, and it will be seen that the Blackburn rate is 16.1 as compared with an average of 14.9 for the other great towns.

Table XI. gives the chief causes of death, and it will be noticed that Diarrhœa and Enteritis caused fewer deaths, as was to be expected during the somewhat cool and wet summer. The number of deaths from Phthisis was somewhat greater than during the preceding 4 years. Of the ordinary infectious diseases, Measles was responsible for the greatest number of deaths.

On referring to Table XIII. it will be seen that during 1914 the lowest death-rates occurred in St. Mark's, St. Michael's and St. Silas' Wards, with rates of 10.4, 11.5, and 11.5 respectively; the highest death-rates were in St. Mary's and St. Peter's Wards, with rates of 27.4 and 20.8 respectively.

Table XIII. also shows the striking difference in the death-rate from Phthisis in the different Wards, St. Mary's, St. John's, St. Peter's, St. Luke's, and St. Mark's having rates of 2.22, 1.94, 1.35, 1.20, and 1.18 respectively, and Park and St. Andrew's rates of 0.40 and 0.44.

TABLE VII.

Year.	Population in Census Years.	Population estimated to middle of year.	Birth Rate.	Death Rate.	Average Death rate in 10 year periods.	Year.	Population in Census Years.	Population estimated to middle of year.	Birth Rate.	Death Rate.	Average death rate in 10 year periods.
1841	36,629	36,849		29.9	29.02	1881	104014	104388	37.5	22.4	23.83
1842	...	37,742		25.0		1882	...	105897	36.9	24.3	
1843	...	38,656		31.5		1883	...	107427	40.0	23.9	
1844	...	39,593		28.8		1884	...	108980	37.9	23.6	
1845	...	40,552		27.7		1885	...	110555	36.1	21.3	
1846	...	41,534		35.7		1886	...	112153	35.6	24.7	
1847	...	42,541		33.9		1887	...	113774	36.5	25.3	
1848	...	43,571		27.8		1888	...	115418	35.6	24.0	
1849	...	44,627		25.2		1889	...	117086	35.5	25.4	
1850	...	45,708		28.7		1890	...	118780	33.8	23.4	
1851	46,536	46,892	43.3	27.0	29.47	1891	120064	120245	33.9	25.9	21.32
1852	...	48,344	41.3	35.1		1892	...	120972	32.0	21.0	
1853	...	49,841	42.7	35.2		1893	...	121704	31.4	22.9	
1854	...	51,384	43.6	25.6		1894	...	122440	29.5	17.7	
1855	...	52,974	41.7	33.6		1895	...	123181	31.6	25.0	
1856	...	54,614	42.5	24.3		1896	...	123926	28.6	18.3	
1857	...	56,306	42.1	32.2		1897	...	124675	29.1	20.2	
1858	...	58,049	39.2	31.8		1898	...	125430	29.1	19.4	
1859	...	59,846	41.4	25.8		1899	...	126185	28.8	20.6	
1860	...	61,699	43.3	24.1		1900	...	126951	27.0	22.2	
1861	63,126	63,434	43.7	27.9	27.83	1901	129216	129311	26.1	19.2	16.8
1862	...	64,681	42.5	28.1		1902	...	129689	25.8	17.3	
1863	...	65,953	38.9	21.8		1903	...	130069	25.4	15.9	
1864	...	67,249	40.5	25.9		1904	...	130451	23.7	17.4	
1865	...	68,572	39.9	27.4		1905	...	130833	24.4	16.6	
1866	...	69,920	39.6	30.7		1906	...	131216	26.0	16.7	
1867	...	71,294	40.8	27.5		1907	...	131600	25.4	17.4	
1868	...	72,696	43.3	26.9		1908	...	131986	25.8	15.3	
1869	...	74,125	40.5	31.5		1909	...	132373	23.7	16.8	
1870	...	75,583	40.7	30.6		1910	...	132760	22.2	14.6	
1871	76,339	76,695	41.1	26.5	26.5	1911	133052	133149	21.4	16.1	
1872	...	78,136	44.3	26.2		1912	...	133539	20.4	14.4	
1873	...	79,604	40.5	30.9		1913	...	133931	21.7	15.8	
1874	...	81,099	40.7	29.9		1914	...	134323	20.8	14.9	
1875	...	82,624	41.2	26.6							
1876	...	84,716	40.4	28.7							
1877	...	90,089	39.0	23.6							
1878	...	96,031	35.9	28.5							
1879	...	98,869	35.5	21.9							
1880	...	102,736	32.9	22.2							

* Part of Witton, Livesey, and Little Harwood—population 8,662.
Half of this has been added to 1877 population.

† Part of Little Harwood and Lower Darwen—population 2,394.
Half of this has been added to year 1879 population.

‡ Part of Witton and Livesey added in November, 1901, and the Registrar General has added this to the 1901 Census figures.

TABLE VIII.
Deaths arranged in Age Periods.

AGE PERIODS.	MALES.		FEMALES.	
	Deaths.	Death Rate	Deaths.	Death Rate.
0-5	257	40·7	220	36·0
5-15	36	3·1	37	3·2
15-25	35	3·1	48	3·5
25-35	60	5·3	55	4·0
35-45	80	9·1	75	7·2
45-55	139	19·8	124	14·7
55-65	177	42·2	169	33·7
65-75	150	79·7	173	62·9
75 and upwards.	69	153·3	102	144·8

TABLE IX.

Monthly Births and Deaths.

Month.	Birth Rate.	Death Rate.	Measles	Scarlet Fever	Whooping Cough.	Croup.	Typhoid Fever.	Diphtheria	Diarrhœa.	Lung Diseases.	Tuber- culosis.	All Other Diseases.
January	21·9	19·1	...	1	...	...	2	1	...	47	14	153
February ...	20·6	17·3	3	1	...	...	...	1	...	43	13	118
March	19·8	15·5	2	3	...	...	2	...	1	50	14	108
April	22·0	15·9	6	1	...	...	...	...	3	42	16	118
May	19·9	13·9	5	1	1	...	...	...	...	30	15	109
June	21·8	11·8	2	...	...	...	...	...	1	19	15	94
July	22·1	10·8	...	...	1	...	1	...	5	16	13	93
August	22·6	10·8	1	1	...	...	...	...	6	25	13	88
September	22·1	13·0	...	...	2	...	1	2	15	24	12	92
October.....	19·8	13·5	...	2	2	...	...	...	13	44	15	97
November...	17·3	15·4	1	...	1	...	..	3	12	53	8	98
December...	19·9	15·3	...	...	2	...	1	...	4	63	8	113

TABLE X.—(SHORTER SCHEDULE B)

CAUSE OF DEATH.	0—1		1—5		5—15		15—25		25—65		65 & up		M.	F.	To- TAL.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Smallpox .....	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	2	3	9	5	...	1	...	...	...	...	...	...	11	9	20
Scarlet Fever .....	...	...	2	4	1	3	...	...	...	...	...	...	3	7	10
Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza.. ..	...	...	2	..	...	...	..	...	7	10	3	2	12	12	24
Whooping Cough	3	3	2	1	...	...	...	...	...	..	...	...	5	4	9
Diphtheria & Membranous Croup	1	...	2	3	...	1	...	...	...	...	...	...	3	4	7
Croup .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever .....	...	...	...	...	...	...	1	1	3	...	1	1	5	2	7
Other continued Fevers ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa and Enteritis.....	27	9	5	5	1	...	...	...	4	6	3	...	40	20	60
Plague .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	2	...	...	...	...	...	...	...	...	1	...	...	2	1	3
Puerperal Fever .....	...	...	...	...	...	...	...	4	..	2	...	...	...	6	6
Other Septic Diseases .....	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
Intermittent and Malarial Cachexia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis of Meninges...	...	...	3	2	5	2	...	...	...	...	...	...	8	4	12
Phthisis	1	...	3	2	3	4	14	8	56	32	..	1	77	47	124
Other Tuberculous Diseases	1	3	3	..	1	2	...	3	2	2	3	...	10	10	20
Malignant Disease (Cancer)	..	...	...	...	...	...	...	...	40	47	18	29	58	71	134
Premature Birth	32	26	...	...	...	...	...	...	...	...	...	...	32	26	58
Developmental Diseases ..	12	7	...	...	...	...	...	...	...	...	...	...	12	7	19
Old Age.....	...	...	...	...	...	...	...	...	..	1	35	50	35	51	86
Meningitis	2	...	7	3	4	3	2	1	1	1	...	...	16	8	24
Inflammation and Softening of Brain .....	...	...	...	...	...	...	...	...	1	2	1	...	2	2	4
Organic Diseases of Heart.	1	1	...	...	3	3	1	10	65	78	45	49	115	141	256
Venereal Diseases .....	...	1	...	...	...	...	...	...	...	1	...	...	...	2	2
Bronchitis	18	20	7	11	3	...	1	1	41	53	36	55	106	140	246
Pneumonia	19	10	22	22	4	6	4	4	45	24	18	14	112	80	192
Pleurisy .....	...	...	...	...	...	1	...	...	3	3	...	1	3	5	8
Other Respiratory Diseases.....	...	1	...	...	...	...	...	...	6	3	...	...	6	4	10
Diseases of Stomach .....	...	2	...	...	...	...	...	...	3	10	5	2	8	14	22
Obstruction of Intestines ...	2	...	...	...	...	...	...	...	1	3	2	..	5	3	8
Cirrhosis of Liver.....	...	...	...	...	...	...	...	...	4	5	1	...	5	5	10
Alcoholism.....	...	...	...	...	...	...	...	...	3	...	...	...	3	...	3
Nephritis & Brights Disease	...	...	...	...	1	...	1	3	26	22	15	14	43	39	82
Tumour and other Affections of female genital organs	...	...	...	...	...	...	...	...	...	7	...	...	...	7	7
Accidents and Diseases of Parturition.....	...	...	...	...	...	...	...	3	...	9	...	...	...	12	12
Deaths by Suicide .....	...	...	...	...	...	...	1	...	19	3	3	1	23	4	27
Homicide .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths from Ill-defined Causes	2	1	2	2	2	2	1	1	16	13	6	2	29	21	50
Deaths by Accidents or Negligence	4	4	3	6	4	1	1	...	15	2	2	3	29	16	45
All other Causes	53	53	3	10	4	8	8	9	94	83	22	51	184	214	398
TOTAL.....	182	144	75	76	36	37	35	48	456	423	219	275	1003	1003	2006

TABLE XI.

[illegible]

TABLE XII.
Weekly Births and Deaths.

1914.	Deaths from all causes.	Death Rate per 1,000 per annum.	Births.	Birth Rate per 1,000 per annum.
Week ending Jan. 3	56	21·7	59	22·9
„ „ 10	47	18·2	63	24·4
„ „ 17	47	18·2	68	26·4
„ „ 24	54	20·9	47	18·2
„ „ 31	51	19·8	52	20·1
„ Feb. 7	31	12·0	57	21·3
„ „ 14	52	20·1	55	20·6
„ „ 21	40	15·4	46	17·8
„ „ 28	49	18·9	55	21·1
„ March 7	46	17·8	47	18·1
„ „ 14	37	14·3	57	22·0
„ „ 21	49	18·9	48	18·5
„ „ 28	37	14·3	48	18·5
„ April 4	38	14·7	63	24·3
„ „ 11	33	12·7	51	19·7
„ „ 18	54	20·9	58	22·4
„ „ 25	37	14·3	55	21·2
„ May 2	34	13·1	49	18·8
„ „ 9	36	13·9	51	19·7
„ „ 16	36	13·9	64	24·7
„ „ 23	36	13·9	60	23·2
„ „ 30	34	13·1	46	17·8
„ June 6	32	12·3	35	13·5
„ „ 13	25	9·6	64	24·7
„ „ 20	40	15·4	59	22·8
„ „ 27	30	11·6	65	25·1
„ July 4	32	12·3	59	22·8
„ „ 11	19	7·3	52	20·1
„ „ 18	31	12·0	60	23·2
„ „ 25	25	9·6	60	23·2
„ August 1	34	13·1	47	18·1
„ „ 8	24	9·2	53	20·5
„ „ 15	30	11·6	28	10·7
„ „ 22	33	12·8	82	31·7
„ „ 29	27	10·4	64	24·7
„ Sept. 5	35	13·5	62	24·0
„ „ 12	29	11·2	55	21·2
„ „ 19	31	12·0	61	23·6
„ „ 26	35	13·5	57	22·0
„ Oct. 3	38	14·7	46	17·8
„ „ 10	27	10·4	57	22·0
„ „ 17	35	13·5	49	18·8
„ „ 24	48	14·7	57	22·0
„ „ 31	40	15·4	50	19·3
„ Nov. 7	37	14·3	57	22·0
„ „ 14	34	13·1	34	13·1
„ „ 21	38	15·7	52	20·1
„ „ 28	52	20·1	42	16·2
„ Dec. 5	39	15·0	40	15·4
„ „ 12	33	12·8	55	21·3
„ „ 19	33	12·8	48	14·7
„ „ 26	37	14·3	44	17·0

Statistics for the various Wards in the Borough.

WARDS.	Popula- tion.	Births	Deaths	Birth Rate.	Death Rate.	Deaths under one year per 1000 Births.	Death- rate from six Zymotic Diseases.	Death- rate from Diar- rhoea Under 2 years	Death- rate from Bronchitis and Pneu- monia.	Death- rate from Phthi- sis.
ST. STEPHEN'S...	11392	231	167	20.2	14.6	121.2	0.26	0.61	3.68	0.96
TRINITY	9467	249	148	26.3	15.6	144.5	0.73	0.42	3.59	0.63
ST. MICHAEL'S..	9496	160	110	16.8	11.5	131.2	0.10	0.31	1.79	0.63
ST. JOHN'S	7731	154	111	19.9	14.3	84.4	0.25	0.12	2.71	1.94
ST. SILAS'	9782	122	113	12.4	11.5	40.9	0.10	0.00	1.84	0.51
ST. PAUL'S	10028	249	150	24.8	14.9	100.4	0.39	0.19	3.49	0.89
ST. PETER'S.....	6660	162	139	24.3	20.8	129.6	0.30	0.75	3.75	1.35
ST. MARY'S	6298	175	173	27.7	27.4	142.8	1.11	0.79	6.03	2.22
ST. MATTHEW'S	9872	221	151	22.3	15.3	140.2	0.40	0.20	3.24	0.81
ST. THOMAS' ...	12982	223	172	17.1	13.2	80.7	0.53	0.38	3.85	0.69
PARK	9994	216	151	21.6	15.1	138.8	0.50	0.40	3.40	0.40
ST. LUKE'S	8299	192	143	23.1	17.2	140.6	0.36	0.24	3.97	1.20
ST. MARK'S ...	10970	210	115	19.1	10.4	80.9	0.36	0.27	2.55	1.18
ST. ANDREW'S...	11352	241	163	21.2	14.3	120.3	0.26	0.00	2.73	0.44
BOROUGH	134323	2805	2006	20.8	14.9	116.2	0.39	0.32	3.26	0.92

TABLE XIV.

Birth-rates and Death-rates for 33 large towns.

Towns.	Birth Rate.	Death Rate.	Deaths under 1 year per 1000 births	Death rate over one year.	Death rate from the six Zymotic diseases & Diarrhoea under 2 yrs.	Death rate from Diarrhoea under 2 yrs	Death rate from Violence.	Inquest Cases percentage to total Deaths.	Uncertified cause of Death percentage to total Deaths.
London ...	24·2	14·3	103	11·8	1·43	0·66	0·50	10·2	0·08
West Ham	30·3	14·8	106	11·6	1·87	0·79	0·57	8·3	0·1
Croydon ...	22·4	11·0	80	9·2	0·71	0·36	0·40	10·1	0·0
Brighton...	17·6	13·2	82	11·8	0·58	0·24	0·33	9·1	0·05
Portsmouth	23·6	12·6	84	10·6	1·12	0·29	0·55	8·5	0·8
Plymouth ..	23·3	17·0	125	14·1	1·52	0·54	0·43	8·1	0·0
Bristol	21·5	13·3	100	11·1	0·96	0·34	0·46	9·4	0·0
Cardiff.....	25·6	13·9	109	11·1	1·58	0·50	0·63	8·7	0·0
Swansea ...	27·2	15·7	141	11·8	2·23	0·61	0·44	7·4	0·2
W'h'mpton	27·0	15·5	103	12·4	1·35	0·80	0·59	8·2	0·06
B'rmingh'm	27·0	14·9	122	11·6	1·92	0·74	0·51	4·3	3·4
Norwich ...	20·3	13·6	110	11·4	1·03	0·50	0·59	6·9	0·1
Leicester...	21·9	13·8	120	11·2	1·34	0·47	0·40	6·6	0·6
Nottingh'm	23·3	15·2	145	11·8	1·65	0·67	0·52	6·6	0·4
Derby	23·9	12·8	92	10·6	0·82	0·35	0·43	9·8	0·0
Birkenhead	27·8	15·1	119	11·8	1·92	0·90	0·50	6·5	0·2
Liverpool...	30·2	19·4	139	15·2	2·59	1·23	0·66	6·7	2·3
Bolton	22·1	14·5	119	11·8	1·87	0·94	0·39	6·2	0·1
Manchester	25·8	16·7	126	13·4	1·88	0·69	0·71	7·8	0·1
Salford ...	26·6	16·5	125	13·1	2·08	0·70	0·52	8·0	0·1
Oldham ...	23·1	17·7	137	14·5	2·67	0·52	0·44	6·1	0·0
Burnley ...	23·8	16·1	157	12·3	2·59	0·76	0·50	6·7	0·4
Blackburn	20·8	14·9	116	12·5	0·71	0·32	0·53	6·5	1·5
Preston ..	23·8	15·6	142	12·2	2·07	0·79	0·50	4·0	2·5
Hudd'sfield	18·2	14·7	111	12·6	0·90	0·16	0·46	6·3	0·8
Halifax ...	17·6	14·6	101	12·8	0·85	0·26	0·49	7·2	0·2
Bradford...	19·6	15·5	122	13·1	1·21	0·28	0·51	9·3	0·1
Leeds	23·4	14·8	123	11·9	1·61	0·62	0·68	9·1	0·04
Sheffield ...	27·4	16·3	131	12·7	2·50	0·86	0·57	6·3	0·6
Hull.....	27·5	15·3	120	11·9	1·76	0·89	0·65	8·9	0·5
Sunderland	32·4	16·8	134	12·5	2·18	1·29	0·66	7·0	1·6
Gateshead.	31·5	18·0	147	13·4	2·60	1·43	0·58	4·1	5·0
Newcastle.	27·8	17·0	135	13·2	2·26	0·87	0·50	7·4	0·4

TABLE XV.

Death-rates from Zymotic Diseases in 33 large towns.

	Small Pox.	Measles	Scarlet Fever.	Diph- theria.	W'ping Cough.	Enteric Fever.	Diarrhoea (under 2 years)
London	0'00	0'30	0'06	0'15	0'20	0'03	0'66
West Ham	0 00	0'44	0'04	0'16	0'38	0'04	0'79
Croydon ...	0'00	0'06	0'02	0'09	0'12	0'03	0'36
Brighton ...	0 00	0'11	0'06	0'09	0'07	0'007	0'24
Portsmouth	0'00	0'16	0'02	0'32	0'20	0'12	0'29
Plymouth ...	0'00	0'33	0'01	0'23	0'33	0'04	0'54
Bristol	0'00	0'25	0'05	0'09	0'18	0'02	0'34
Cardiff	0'00	0'32	0'10	0'21	0'39	0'03	0'50
Swansea ...	0'00	0'67	0'08	0'10	0'70	0'04	0'61
Wolverh'ton	0'00	0'11	0'05	0'18	0'17	0'02	0'80
Birmingham	0'00	0'36	0'15	0'29	0'35	0'01	0'74
Norwich ..	0'00	0'11	0'07	0'23	0'07	0'04	0'50
Leicester ...	0'00	0'44	0'02	0'06	0'32	0'02	0'47
Nottingham	0'00	0'54	0'04	0'13	0'23	0'01	0'67
Derby	0'00	0'15	0'03	0'09	0'18	0'007	0'35
Birkenhead	0'00	0'48	0'04	0'11	0'35	0'02	0'90
Liverpool ...	0'00	0'68	0'15	0'14	0'32	0'05	1'23
Bolton	0'00	0'33	0'01	0'23	0'27	0'06	0'94
Manchester	0'00	0'40	0'21	0'13	0'38	0'05	0'69
Salford	0'00	0'47	0'33	0'16	0'32	0'08	0'70
Oldham	0'00	1'13	0'31	0'27	0'37	0'03	0'52
Burnley	0'00	1'14	0'08	0'13	0'42	0'03	0'76
Blackburn	0'00	0'14	0'07	0'05	0'06	0'05	0'32
Preston	0'00	0'39	0'35	0'22	0'22	0'08	0'79
Huddersfield	0'00	0'44	0'02	0'02	0'19	0'05	0'16
Halifax	0'00	0'08	0'03	0'12	0'19	0'12	0'26
Bradford ...	0'00	0'39	0'02	0'11	0'32	0'06	0'28
Leeds... ..	0'00	0'46	0'06	0'11	0'30	0'04	0'62
Sheffield ...	0'00	0'78	0'18	0'13	0'48	0'05	0'86
Hull	0'00	0'34	0'02	0'17	0 18	0'14	0'89
Sunderland	0'00	0'11	0'15	0'17	0'40	0'04	1'29
Gateshead...	0'00	0'51	0'14	0'05	0'37	0'07	1'43
Newcastle ..	0'00	0'79	0'16	0'09	0'27	0'06	0'87

TABLE XVI.

Showing Population, Birth-rates, and Death-rates, for the last 20 years in Blackburn.

Year.	Estimated Population	Birth Rate.	Death Rate.	Death rate from Bronchitis. Pneumonia & Pleurisy.	Death rate from Phthisis.	Death rate from other Tubercular Disease.	Deaths under 1 year per 1000 Births.
1895	123,181	31·6	25·0	4·7	1·2	1·1	235
1896	123,926	28·6	18·3	3·8	1·1	0·5	172
1897	124,675	29·1	20·2	4·0	1·1	0·7	207
1898	125,430	29·1	19·4	3·6	1·2	0·5	204
1899	126,185	28·8	20·6	4·4	1·2	0·5	193
1900	126,951	27·0	22·2	4·8	1·1	0·7	221
1901	129,311	26·1	19·2	3·7	1·1	0·7	193
1902	129,689	25·8	17·3	3·5	1·2	0·7	157
1903	130,069	25·4	15·9	3·4	0·9	0·6	158
1904	130,451	23·7	17·4	3·7	0·9	0·6	191
1905	130,833	24·4	16·6	3·1	1·0	0·6	146
1906	131,216	26·0	16·7	2·7	0·9	0·5	155
1907	131,600	25·4	17·4	3·7	1·0	0·6	151
1908	131,986	25·8	16·3	3·0	1·1	0·5	149
1909	132,373	23·7	16·8	3·7	1·0	0·4	127
1910	132,760	22·2	14·6	2·7	0·8	0·4	136
1911	133,149	21·4	16·1	3·1	0·8	0·3	186
1912	133,539	20·4	14·4	3·0	0·8	0·2	119
1913	133,931	21·7	15·8	3·1	0·6	0·3	147
1914	134,323	20·8	14·9	3·3	0·9	0·2	116

TABLE XVII.
Inquest Cases.

Natural Causes	44
Accidents	31
Suicide	26
Burns	8
Accidentally Drowned	6
Accidentally Suffocated	5
Scalds	5
Asphyxia	2
Blood Poisoning	1
Excessive Drinking	2
Septic Poisoning	1

Ages of persons burnt :—48 years, 45 years, 31 years, 4 years, 3 years (two), 2 years, 16 months.

Ages of persons suffocated :—5 months, 4 months, 11 weeks, 6 weeks, 27 days.

131 Inquests were held during the year, as compared with 141 during 1913.

INFANTILE MORTALITY.

During 1914 the death-rate of children under 1 year per 1,000 births was 116.2, as compared with 147.8 during 1913.

The Infantile Death-Rates for England and Wales during 1914 were as follow :—

	Deaths under 1 Year per 1,000 births.
England and Wales	105
97 Great Towns (including London) ...	113
145 Smaller Towns	104
England & Wales (less the 242 towns)..	93

The Infantile Mortality Rate for Blackburn was the lowest on record for the Borough, and shows a marked improvement when compared with the rate for the previous year.

On taking into consideration that Blackburn is an industrial centre, the rate compares very favourably with the average rate for the 97 great towns.

It will be seen in Table XX. that only 36 deaths of children under 1 year of age were ascribed to Diarrhœa, as compared with 102 in the preceding year. Although one would like to attribute this reduction to improved sanitary conditions and to the exercise by parents of greater care as regards the feeding of their infants and the cleanliness of their homes, it is probable that climatic conditions played an important part in producing this reduction in the number of deaths from diarrhœa. The abundant rainfall during the latter part of the summer certainly helped to cleanse the Borough and mitigate those conditions which tend to cause the prevalence of Diarrhœa.

Prematurity, developmental defects and debility at birth continue, unfortunately, to levy a heavy toll on infant life.

TABLE XVIII.

Deaths under One Year, arranged according to Days, Weeks and Months.

CAUSES OF DEATH.	1st day.	2nd day.	3rd day.	4th day.	5th day.	6th day.	7th day.	1st week.	2nd Week	3rd week.	4th week.	Under 1 month.	1 month to 2.	2 months to 3.	3 months to 4.	4 months to 5.	5 months to 6.	6 months to 7.	7 months to 8.	8 months to 9.	9 months to 10.	10 months to 11.	11 months to 12.	TOTAL.
All causes { Certified	33	13	12	2	5	1	4	70	13	23	13	119	39	26	16	21	15	19	11	9	13	15	13	316
Uncertified	5	1	..	..	..	..	..	6	..	1	..	7	2	..	..	..	..	1	..	..	..	..	..	10
Smallpox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	..	..	5
Scarlet Fever.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..
Whooping-cough.....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	1	..	..	2	6
Diphtheria and Croup.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Erysipelas .....	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	2
Tuberculous Meningitis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2	..	4
Other Tuberculous Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Meningitis (<i>not Tuberculous</i>)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	2
Convulsions	3	..	2	1	..	..	1	7	1	2	1	11	3	3	1	2	1	2	1	1	..	..	1	26
Laryngitis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
Bronchitis .....	..	..	..	..	..	..	..	..	1	3	4	6	3	3	7	1	4	2	1	3	2	2	2	38
Pneumonia (all forms).....	..	..	..	..	..	..	..	..	1	..	..	1	..	2	2	3	5	2	2	1	5	3	3	29
Diarrhœa .....	..	..	..	..	..	..	..	..	..	1	1	2	9	4	4	2	1	5	..	1	1	3	2	34
Enteritis .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	2
Gastritis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	2
Syphilis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
Rickets.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	2
Suffocation, overlying.....	..	..	..	..	..	..	..	..	..	..	1	1	1	2	..	1	..	..	..	..	..	..	..	5
Injury at birth	4	..	..	..	..	1	..	5	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	5
Atelectasis	1	1	2	..	1	..	..	5	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	5
Congenital Malformations ..	3	1	1	..	..	..	1	6	1	2	..	9	1	..	..	..	..	1	..	1	..	2	..	14
Premature birth.....	23	7	5	1	2	..	..	38	5	4	3	50	3	4	..	..	..	..	..	..	..	1	..	58
Atrophy, Debility and	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marasmus.....	4	4	2	..	1	..	2	13	4	10	4	31	12	5	3	6	1	2	2	..	..	..	..	62
Other causes .....	..	1	..	..	1	..	..	2	1	4	..	7	4	1	1	..	1	2	..	1	2	..	2	21
TOTAL	38	14	12	2	5	1	4	76	13	24	13	126	41	26	16	21	15	20	11	9	13	15	13	326

Table XIX.

Infantile Mortality in Wards from 1905 to 1914.

WARD.	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Average for 10 years.
St. Stephen's	156·1	157·3	126·8	137·8	101·9	101·8	157·3	113·5	120·8	121·2	129·4
Trinity ...	182·9	169·4	158·8	153·0	172·4	191·4	162·3	140·5	229·4	144·5	170·4
St. Michael's	138·3	133·0	130·2	120·1	102·4	101·5	96·4	81·4	78·5	131·2	111·3
St. John's	141·4	140·6	151·8	155·0	125·8	115·6	189·0	121·9	128·2	84·4	135·3
St. Silas'...	75·4	97·2	108·1	75·3	85·3	37·0	120·5	69·4	58·8	40·9	76·7
St. Paul's	153·8	127·8	140·4	146·7	137·0	135·1	194·6	122·3	142·8	100·4	140·0
St. Peter's	131·1	230·7	211·6	240·8	142·0	177·2	315·4	116·8	222·8	129·6	191·8
St. Mary's	176·1	257·6	262·1	185·1	171·7	226·0	280·5	115·9	222·9	142·8	204·0
St. Matthew's	130·9	133·5	144·8	143·3	114·0	141·0	180·6	115·7	142·8	140·2	138·6
St. Thomas's	132·0	135·8	125·4	127·3	114·2	129·4	172·1	105·4	132·3	80·7	125·4
Park	157·2	148·2	146·8	169·6	140·4	133·3	258·3	147·9	158·3	138·8	159·8
St. Luke's	206·8	224·5	204·9	147·8	127·7	173·0	212·2	168·5	144·8	140·6	175·0
St. Mark's	121·0	187·0	145·1	124·0	113·7	100·9	156·0	90·4	157·8	80·9	127·6
St. Andrew's	125·0	83·3	112·7	166·6	135·6	140·5	176·9	143·4	122·3	120·3	132·6
Borough...	146·2	155·9	151·7	149·3	127·4	136·0	186·9	119·2	147·8	116·2	143·6

Table XX.—Deaths under One Year from 1897—1914.

Disease.	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Zymotic Diseases.....	75	17	51	57	36	29	24	54	22	27	34	18	21	16	35	28	9	12
Diarrhoea	112	153	79	143	149	54	78	98	76	136	40	115	44	58	166	31	102	36
Lung Diseases	138	114	107	140	100	99	116	139	83	69	124	84	84	83	84	61	68	68
Convulsions	51	51	54	49	40	23	30	30	26	35	22	27	23	26	26	28	38	26
Tuberculosis	46	31	26	45	41	46	38	43	28	20	30	23	15	19	8	9	16	5
Debility, Atrophy, Marasmus, Inanition...	53	63	39	24	47	69	46	59	54	71	48	62	38	44	74	53	74	62
Premature Birth, Developmental.....	80	93	105	110	103	90	100	97	86	89	107	91	87	81	88	81	68	77
Dentition.....	19	12	21	17	18	20	7	10	10	17	17	4	7	..	5	9	4	2
All Others	178	216	223	177	122	100	84	65	82	69	86	86	81	74	48	27	52	38
All Causes	752	750	706	762	656	530	523	595	467	533	508	510	400	401	534	327	431	326

Table XXI.—Deaths under One year of Age for the last Eight Years

	1907.		1908.		1909.		1910.		1911.		1912.		1913.		1914.	
	Deaths	Rate per 1000 Births	Deaths	Rate per 1000 Births	Deaths	Rate per 1000 Births.	Deaths	Rate per 1000 Births	Deaths	Rate per 1000 Births	Deaths	Rate per 1000 Births	Deaths	Rate per 1000 Births	Deaths	Rate per 1000 Births
Zymotic Diseases	34	10.1	18	5.2	21	6.6	16	5.4	35	12.2	28	10.2	9	3.0	12	4.2
Diarrhœa	40	11.9	115	33.6	44	14.0	58	19.6	166	58.1	31	11.2	102	34.9	36	12.8
Lung Diseases ...	124	37.4	84	24.5	84	26.7	83	28.1	84	29.4	61	22.2	68	23.3	68	24.2
Convulsions	22	6.5	27	7.9	23	7.3	26	8.8	26	9.1	28	10.2	38	13.0	26	9.2
Tuberculosis	30	8.9	23	6.7	15	4.7	19	6.4	8	2.8	9	3.2	16	5.4	5	1.7
Debility, Atrophy, Marasmus, Inanition	48	14.3	62	18.1	38	12.1	44	14.9	74	25.9	53	19.3	74	25.3	62	22.1
Premature Birth, Developmental	107	31.9	91	26.6	87	27.7	81	27.4	88	30.8	81	29.5	68	23.3	77	27.4
Dentition.....	17	5.0	4	1.1	7	2.2	...	...	5	1.7	9	3.2	4	1.3	2	0.7
All Others	86	25.6	86	25.1	81	25.8	74	25.1	48	16.8	27	9.8	52	17.8	38	13.5
All Causes	508	151.7	510	149.3	400	127.4	401	136.0	534	186.9	327	119.2	431	147.8	326	116.2

Infantile Death Rates in 24 large towns.

Deaths Under One Year to 1,000 Births Registered.															
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Average
London	149	141	131	144	131	132	115	113	107	102	128	90	107	103	121
Bristol	130	130	116	133	122	128	100	126	100	91	139	102	96	100	115
Wolverhampton	162	133	141	152	136	140	130	132	138	107	135	87	130	103	130
Birmingham	186	156	158	195	155	168	148	145	134	130	164	112	129	122	150
Leicester	175	152	161	163	147	166	132	132	127	127	132	111	120	120	140
Nottingham	193	158	164	175	155	171	165	146	150	129	163	117	130	145	154
Derby	154	124	128	143	151	114	120	112	124	85	124	79	102	92	118
Birkenhead	181	148	155	180	127	151	109	136	124	135	135	97	116	119	136
Liverpool	187	162	159	196	154	171	145	142	144	139	155	125	131	139	153
Bolton	171	134	152	167	166	138	146	149	129	117	164	98	144	119	142
Manchester	198	152	168	187	157	166	147	151	134	132	155	121	127	126	151
Salford	204	155	166	193	150	160	141	153	142	130	149	128	136	125	152
Oldham	172	148	160	155	150	145	145	160	122	128	161	116	141	137	145
Blackburn	193	157	159	191	146	155	151	149	127	136	186	119	147	116	152
Preston	216	188	161	183	152	200	158	154	136	158	175	120	160	142	164
Huddersfield	131	137	120	136	119	135	97	111	95	99	134	95	104	111	116
Halifax	127	143	122	130	130	118	104	101	97	91	123	81	101	101	112
Bradford	168	138	147	166	144	152	125	143	116	127	139	99	127	122	136
Leeds	188	159	153	176	152	152	132	138	121	132	159	102	133	123	144
Sheffield	200	149	182	158	167	158	146	140	118	127	140	106	128	131	146
Hull	174	137	162	181	153	161	127	145	114	135	156	101	128	120	142
Sunderland	181	152	156	165	143	140	130	147	136	129	154	116	135	134	144
Newcastle-on-Tyne.	178	139	165	156	135	151	123	137	120	121	136	102	121	135	137
Cardiff	147	146	122	144	118	135	132	126	104	112	133	109	115	109	125
Average.....	171	147	147	164	143	148	129	133	121	120	144	103	123	117	

Table XXIII.

Investigation of Children who attained or should have attained the age of 6 months during the year (*i e.*, children born from July 2nd, 1913, to June 30th, 1914).

Number of children who should have attained the age of 6 months during the year 2142
 Number of children who attained the age of 6 months during the year 1868
 Number of children who attained the age of 6 months during the year and were investigated 1633
 Number of children who died before attaining 6 months of age 274

A.—CHILDREN OF INDUSTRIAL MOTHERS (*i.e.*, Mothers engaged in work away from home) ... 1178 investigated.

Condition of child at end of 6 months.	FEEDING.														Not fed.	Time work discontinued before and resumed after confinement.										Nursed away from home		Cleanliness of child			Cleanliness of home					
	Percentage of the 1178 children investigated.	Entirely breast fed.	Partly breast and partly artificially fed.													Entirely artificially fed.	Ceased work before confinement.						Resumed work after confinement.				Yes.	No	Good	Medium	Bad	Good	Medium	Bad		
			Breast feeding alone up to end of						Breast jointly with artificial feeding up to end of								Under 1 week			Over 1 week and under 1 month			Over 1 month and under 2 months			Over 2 months and under 3 months										
			3 weeks	1st month	2nd month	3rd month	4th month	5th month	1st month	2nd month	3rd month	4th month	5th month	6th month			Under 1 week	Over 1 week and under 1 month	Over 1 month and under 2 months	Over 2 months and under 3 months	Over 3 months	Under 1 week	Over 1 week and under 1 month	Over 1 month and under 2 months	Over 2 months and under 3 months	Over 3 months										
Satisfactory	58.4	27.1	2.4	22.6	12.4	7.6	3.4	1.8	1.6	1.4	1.8	2.1	2.0	19.0	20.6	...	6.0	11.3	24.5	17.7	40.0	0.0	0.1	22.2	12.4	17.1	87.4	62.2	85.3	12.6	2.0	72.5	19.6	7.8		
Fairly satisfactory	21.4	12.7	4.7	25.8	15.4	7.1	3.9	3.1	0.8	5.9	4.0	2.4	2.7	15.5	25.4	...	7.1	13.8	21.0	17.8	36.1	0.0	0.4	29.7	13.5	23.0	73.1	60.7	71.0	24.2	4.7	52.3	39.0	8.7		
Unsatisfactory	6.2	6.8	8.2	28.7	15.0	4.1	2.7	0.0	4.1	8.2	6.8	4.1	0.0	8.2	30.1	...	8.2	10.9	23.3	21.9	38.4	0.0	2.7	27.4	15.0	13.7	34.2	65.7	58.9	30.1	10.9	49.3	27.4	23.2		
Dead	13.9	11.5	4.8	17.7	5.5	3.6	0.0	1.2	1.2	1.8	2.4	1.8	0.0	0.0	27.4	25.6	14.6	11.5	20.1	17.0	36.5	0.0	0.0	14.0	1.8	1.8	12.1	87.8	52.4	17.7	1.2	65.8	26.2	7.9		

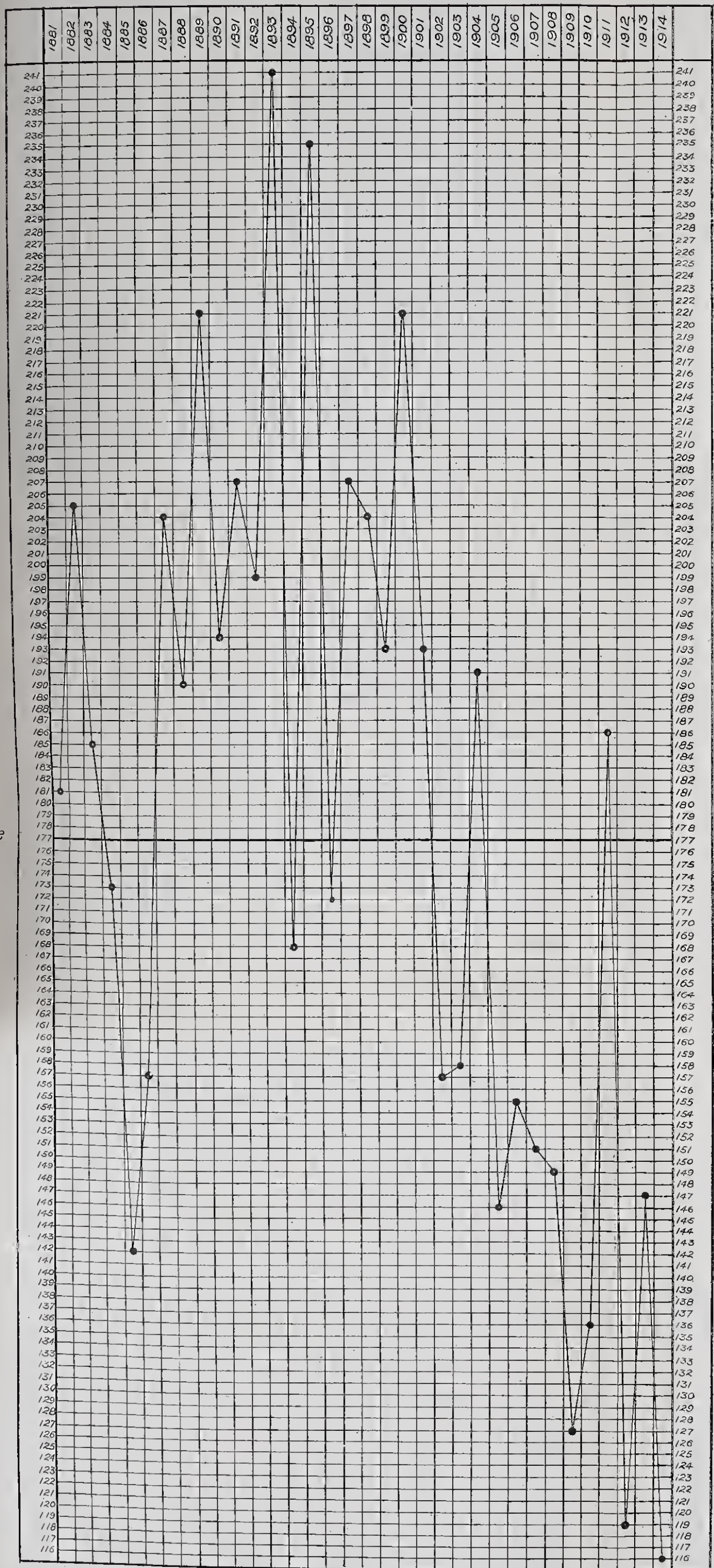
B.—CHILDREN OF NON-INDUSTRIAL MOTHERS (*i.e.*, Mothers not engaged in work away from home) ... 729

Condition of child at end of 6 months.	FEEDING.															Not fed.	Cleanliness of child			Cleanliness of home		
	Percentage of the 729 children investigated.	Entirely breast fed.	Partly breast and partly artificially fed.												Entirely artificially fed.		Good	Medium	Bad	Good	Medium	Bad
			Breast feeding alone up to end of						Breast jointly with artificial feeding up to end of													
			3 weeks	1st month	2nd month	3rd month	4th month	5th month	1st month	2nd month	3rd month	4th month	5th month	6th month								
Satisfactory	60.9	59.4	2.7	6.0	5.6	4.7	3.6	2.0	0.4	0.4	1.5	0.4	0.7	7.6	12.8	...	87.4	10.1	2.4	80.6	15.5	3.8
Fairly satisfactory	19.3	30.5	3.3	17.7	5.6	7.8	3.5	2.1	1.4	2.1	2.8	1.4	1.4	5.6	26.2	...	75.1	20.5	4.3	63.8	26.9	9.2
Unsatisfactory	4.6	5.8	8.8	5.8	29.4	11.7	8.8	2.9	0.0	0.0	0.0	2.9	2.9	11.7	26.4	...	55.8	32.4	11.7	35.3	38.2	26.4
Dead	15.1	8.1	11.8	6.3	3.6	2.7	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	31.8	35.4	34.5	12.7	2.7	67.2	21.9	10.9



CHART 1.

Infantile Mortality, 1881-1914.



Average

Average for 34 Years—177.

The foregoing Table was compiled with a view to showing what effect, if any, engagement of mothers away from home had on their children during the first 6 months of life. According to these figures, there is little evidence that the children of industrial mothers suffer as compared with those of non-industrial mothers, at any rate up to 6 months of age. They show, however, that, when the mother is engaged away from home, artificial feeding tends to replace breast feeding to a considerable extent, and the effect of this may not become evident until after the first 6 months of life.

WORK OF THE LADY HEALTH VISITORS.

There are four Lady Health Visitors, and their work may be divided into three sections :—

1—Infant Visiting.

2—Home Visiting of Cases of Tuberculosis.

3—Obtaining particulars of cases of non-notifiable infectious disease.

1—INFANT VISITING.

The Notification of Births Act enables the Department to obtain early information of the Births in the Borough, and the four Lady Health Visitors have visited the homes where 2,670 of the 2,805 births registered during the year have occurred.

2,556 of the infants visited were legitimate and 114 illegitimate. The illegitimate births are referred to on page 12.

It will thus be seen that the large majority of infants born in the Borough are visited. If a doctor is not in attendance at the birth, the first visit is paid during the

mother's lying-in period, and by this means not only are particulars obtained about the child and advice given to the mother concerning its feeding and general welfare, but also the work of the midwife is supervised.

Efforts are made to induce the mother to undertake breast feeding, and, if for one reason or another this is impossible, advice is given on the artificial feeding of the infant.

Subsequent visits are paid to the child during the first 12 months of its life, the number of which depending upon the conditions of each individual case.

At these subsequent visits attention is also given to the general hygiene of the home.

2—HOME VISITING OF CASES OF TUBERCULOSIS.

During the year every notified case of Tuberculosis has been visited at the homes by the Lady Health Visitors, and particulars obtained concerning the case and the ventilation and cleanliness of the home. 216 cases were thus investigated, and the particulars are given in the section of this Report dealing with Tuberculosis

Subsequent visits are paid to the houses according to the requirements of each case.

3—OBTAINING PARTICULARS OF CASES OF NON-NOTIFIABLE INFECTIOUS DISEASE.

Cases of non-notifiable infectious disease, *i.e.*, Measles, Whooping Cough, Mumps, and Chicken-pox, occurring amongst school children, are reported to the Health Department by the Head Teachers or the School Attendance Officers. These cases are investigated by the Health Visitors, and particulars obtained as to the patients and contacts with the patients.

Instructions are given to the parents as regards preventing the spread of infection and the return of patients and contacts to School.

2,247 homes were visited in this connection.

MATERNITY AND CHILD WELFARE WORK.

A Babies' Clinic is held at the Health Office one afternoon each week; 663 attendances have been made at this Clinic during the year. At the Clinic the children are weighed, and advice given on any point in connection with their feeding or general welfare.

As it was found difficult to induce mothers to bring their children to the Clinic at the Health Office from distant parts of the Borough, the Health Committee decided towards the end of the year to open 3 other centres in poor and populous districts.

It is hoped at these centres—

- (1) To give mothers advice as to the feeding and general care of their infants.
- (2) To keep in touch with the child from infancy to School age.
- (3) To give advice to expectant mothers as to their preparation for maternity and care of themselves during pregnancy.
- (4) To give popular lectures on health matters generally.

One of these centres has already been established at Copy Nook, and the other two will be started as soon as suitable accommodation can be found.

These centres are to be under the control of the Medical Officer of Health, and to be worked by the Health Visitors. The general advice on feeding and care of infants and on health matters generally will be given by the staff of the Health Department.

The general practitioners of the Borough have promised to give their services gratuitously in connection with these centres, and it has been arranged that one practitioner will attend so that the mothers can individually consult him and obtain advice as to the ailments of their babies.

It is hoped later on to be able to treat at the centre at the Health Office those cases which through poverty cannot obtain the treatment from a private medical practitioner. The carrying out of this treatment will be in the hands of the general medical practitioners of the Borough.

It has also been attempted to secure the co-operation of the Midwives in the work to be carried on at the centres so that they will encourage both expectant mothers and mothers with young babies to attend the clinics.

The Nursing Mothers' Aid Society, which now has its restaurant in Adelaide Street, has continued to carry on the useful work referred to in previous reports. This Society has now been in existence for nearly eight years, and has for its main object the feeding of mothers or expectant mothers drawn from the poorer sections of the working classes, for periods varying from a month before the birth of the baby to two months after the birth. By this means it is hoped that the mothers will be helped and encouraged to breast-feed their children. Afterwards the baby is brought weekly to the restaurant to be weighed and examined by a medical man. Owing to the courtesy of Mr. Henry Schofield, the Hon. Secretary of this Society, I have had the advantage of examining the charts which indicate the weekly weights

of the infants. These records show that this Society is supplementing the work of the Health Department in a very important degree.

SUPERVISION OF MIDWIVES.

Two of the Health Visitors, *i.e.*, Miss St. Stephens and Miss Lowe, also carry out the duties of Inspectors of Midwives.

This work includes the following :—

- (a) Inspection of registers and case books kept by the Midwives, the condition of their appliances and instruments, and the cleanliness of their persons and of their homes.
- (b) The supervision of their work at the labours and during the lying-in period.
- (c) Instruction of the Midwives in matters pertaining to their work.
- (d) Investigation of cases of Puerperal Fever, Ophthalmia Neonatorum and of any cases in which it is suspected that the Midwife has not carried out her duties in a proper manner.

112 visits were paid to Midwives practising within the Borough during the year.

At the end of 1913 the names of 49 Midwives were on the register, 39 of these women practising as Midwives and 10 either acting as Maternity Nurses or not practising at all. During the year, 1 resigned, 2 removed from the district and 1 died.

The names of 2 Midwives were added to the register during the year, there thus being 47 names registered at the end of 1914.

Of these Midwives, 24 have been trained and have obtained certificates after examination; 2 others have also been trained, but have not obtained their certificates; the remainder are on the Midwives' Roll by virtue of their having been in practice previous to the passing of the Midwives' Act, 1902. 7 of the Midwives are too illiterate to write up their cases in the case books and 2 being incapable of recording pulse or temperature.

All the Midwives wear washable dresses and aprons, and carry bags fitted with the necessary appliances.

In 6 instances the Midwife has failed to comply with one or other of the Rules of the Central Midwives' Board, and has been either interviewed or written to on the matter by the Medical Officer of Health.

3 cases of Ophthalmia and 15 of slight Inflammation of the eyes have occurred in the Midwives' practice.

In a few instances "handy women" have acted as Midwives in cases of emergency, but as a rule a medical man or Midwife has taken charge of the case after the emergency has been dealt with. In every instance the "handy woman" has been cautioned against acting as a Midwife.

On the whole the Midwives' work has been carried out in a satisfactory manner.

The following particulars relate to the 39 Midwives inspected :—

CONDITION OF BAGS.

Satisfactory	25
Fairly satisfactory	10
Unsatisfactory	4

CONDITION OF CASE-BOOKS.

Satisfactory	29
Fairly satisfactory	7
Unsatisfactory	3

TEMPERATURE CHARTS.

Satisfactory	28
Fairly satisfactory	7
Unsatisfactory	4

CLEANLINESS OF HOUSE.

Satisfactory	32
Fairly satisfactory	7
Unsatisfactory	

CLEANLINESS OF PERSON.

Satisfactory	32
Fairly satisfactory	7
Unsatisfactory	

Number of Midwives' Houses with Bath-rooms	14
--	----

REASONS FOR SENDING FOR MEDICAL HELP.

PREGNANCY :

Albuminuria	1
Ante-Partum Hæmorrhage	2
Oedema	1

LABOUR :

Presentations—

Undiagnosed	2
Contracted Pelvis	6
Occipito-posterior	4
Arm	2
Face	2
Foot	5
Funis	1
Transverse	10
Breech	4
Knee	1
Abortion	9
Eclampsia	2
Rigid Cervix	2

Post-Partum Hæmorrhage	3
Ante-Partum Hæmorrhage	4
Adherent Placenta	8
Retained Placenta	1
Rigid Perinæum	12
Ruptured Perinæum	53
Obstructed Labour	22
Delayed Labour—1st stage	15
,, ,, 2nd stage	3
High Temperature	1
Head Impacted	9
Miscellaneous	8

PUERPERIUM :

Rise of Temperature	17
Collapse	9
Phlebitis	1
Influenza	1

INFANT :

Asphyxia	1
Debility	13
Prematurity	11
Ophthalmia	3
Inflammation of Eyes (slight)	15
Jaundice	1
Convulsions	8
Phimosis	2
Diarrhœa	1
Bronchitis	2
Malformations	4
Miscellaneous	8

Table XXIV.—Deaths in Childbed during the last Ten Years.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Puerperal Fever	10	5	12	2	7	8	5	3	3	6
Placenta Prævia—Flooding	3	4	1	4	3	4	3	1	1	1
Puerperal Convulsions	2	3	...	5	3	5	3	3	3	...
Abortion—Miscarriage	2	1	2	1	2	2	1	2	1	2
Other Accidents of Child Birth	11	2	11	4	5	2	7	3	8	9
Puerperal Mania .....	...	...	2	...	...	...	...	...	...	...
Puerperal Thrombosis	2	3	1	...	...	...	2	...	...	...
	20	13	17	16	20	21	21	12	16	18
Number of Puerperal Cases Notified	24	12	25	11	11	10	9	9	8	10

Table XXV — Midwives Registered during 1914.

No.	Name.	Address.	Date of Enrolment.	Qualification.
9050	Arner, Emma	98 Accrington Road	1904—Oct. 27	L.O.S., 1900
5626	Backhouse, Ruth	19 Oozebooth Terrace	„ June 30	In Practice July, 1901
5627	Baylie, Margaret	31 Shorrock Lane	„ June 30	Ditto
5788	Beard, Mary	2 Bright Street	„ June 30	Ditto
34447	Coggins, Mary Emma	2 Paradise Terrace	1911—Oct. 28	C.M.B.
6235	Collins, Rose Ann	26 Lord Derby Street	1904—July 21	In Practice July, 1901
38867	Coling, Lilly Elizabeth	46 Leamington Road	1913—Nov. 1	C.M.B.
5628	Conway, Mary Ann	35 Eccles Street	1904—June 30	In Practice July 1901
10257	Corrigan, Mary Ann	11 Henrietta Street	„ Nov. 24	Ditto
26684	Counsell, Elizabeth Ellen	59 Riley Street	1908—July 22	St. Mary's Hospital, C.M.B.
18468	Doran, Annie	43 Daisy Street	1905—April 27	In Practice July, 1901
26708	Duckett, Teresa Agnes	11 Southworth Street ...	1908—June 23	C.M.B.
5829	Fairbrother, Elizabeth	40 Pickup Street	1904—June 30	In Practice July, 1901
13654	Fowler, Charlotte	16 St. Philip's Street	1905—Feb. 23	Ditto

No.	Name.	Address.	Date of Enrolment.	Qualification.
6524	Galloway, Selina Ann	72 Duke's Brow.....	1904—July 21	In Practice July, 1901
3690	Gleeson, Annie	5 Park Road.....	„ April 28	L.O.S., July 10, 1900
38223	Glover, Janet.....	80 Whalley New Road	1913—June 16	C.M.B.
5650	Glover, Mary.. .. (née Newton)	80 Whalley New Road.....	1905—June 30	L.O.S., February 26, 1904
27389	Greenwood, Bridget	25 Emily Street	1908—Dec. 2	St. Mary's Hospital, C M.B.
10293	Hacking, Annie	6 Brothers Street	1904—Nov. 24	In practice July, 1901.
6604	Haworth, Mary.....	98 Haslingden Road	„ July 21	Ditto
22142	Haworth, Margaret	106 Lower Audley Street	1905—April 27	C.M.B.
22934	Hill, Jane Emily	1a Lower Hollin Bank Street	1906 Feb. 22	C.M.B.
5824	Hoghton, Mary Jane	9 Bicknell Street	1904—June 30	In practice July, 1901.
38279	Killingbeck, Margaret	109 Byrom Street	1913—June 16	C.M.B.
5630	Leigh, Elizabeth	91 London Road	1904—June 30	In Practice, July, 1901.
31681	Leyland, Emily Maud	15 Audley Street	1910—June 25	C.M.B.
3819	Lightbown, Margaret	329 Bolton Road.....	„ April 28	St. Mary's Hospital, Manchester, March, '99

Table XXV.—continued.

No.	Name.	Address.	Date of Enrolment.	Qualification.
38268	Lancaster, Ruth C. P.....	62 Revidge Road	1910 Feb. 21	C.M.B., 1910.
16461	McCall, Elizabeth Alice.....	122 London Road	1904—Mar. 23	In Practice July, 1901.
31752	Mitchell, Edith	609 Bolton Road	1910—June 25	C.M.B.
6527	Moore, Alice	82 Derby Street	1905—July 21	In Practice July, 1901.
31772	Oates, Margaret Ann.....	311 Bolton Road	1910—June 25	St. Mary's Hospital, C.M.B., 1910
8593	Ormerod, Nancy	40 Hickory Street.....	1905—Oct. 27	In Practice July, 1901
30171	Parkington, Elizabeth	116 New Bank Road	1910—Feb. 21	C.M.B., 1910
31592	Parrish, Eliza	152 Moss Street.....	„ Sept. 1	In Practice July, 1901
57209	Peacock, Sarah Elizabeth	169 Whalley Old Road ..	1905—Sept. 29	Ditto
1300	Polsue, Sophie.....	5 St. Andrew Street.....	1904—Jan. 28	C.M.B.
5938	Porter, Betsy Jane	16 Lord Byron Street	1901—June 30	In Practice July, 1901
5935	Rimmer, Ellen	76 Artillery Street ..	„ June 30	Ditto
31429	Saul, Elizabeth	7 Thorn Street	1911—Oct. 28	C.M.B.
38453	Thomas, Florence Beatrice	46 Leamington Road	1913—July 3	In Practice July 1901.

Table XXV.---continued.

No.	Name.	Address.	Date of Enrolment.	Qualification.
6076	Whalley, Jane Ellen.....	2 Elgee Street	1904 June 30	In Practice July, 1901
31423	Widdup, Elizabeth E..... (nee Coupe)	22 Ward Street	1910--Sept. 1	C.M.B.
6239	Wilson, Annie	40 Inkerman Street ..	1904--July 21	In practice July, 1901.
22892	Wood, Emma Lucy	178 Redlam, Witton	1905--Nov. 25	C.M.B.
5631	Wrigley, Mary	48 Craig Street	1904 - June 30	In Practice July, 1901
5639	Yates, Mary Alice	102 Newton Street	„ June 30	Ditto
30930	Yates, Sarah Louisa	33 Sarah Ellen Street	1910--June 25	C.M.B., 1910

INFECTIOUS DISEASES.

The death-rates for the principal infectious diseases per 1,000 living during 1914 are given below, and compared with the average rates for 97 great towns of England and Wales :—

	97 Large Towns.	Black- burn.
Smallpox.....	0·00	0·00
Measles	0·34	0·14
Scarlet Fever	0·09	0·07
Whooping Cough	0·25	0·06
Typhoid Fever	0·04	0·05
Diphtheria	0·16	0·05
Diarrhœa and Enteritis { per 1000 population	0·64	0·32
under 2 years. { per 1000 births ...	25·85	15·32

It will be seen on reference to Table XXVII. that 904 cases were notified by Medical Practitioners under the Infectious Diseases Notification Act, and 272 under the Public Health (Tuberculosis) Regulations. 15 cases of Ophthalmia Neonatorum were also notified under the Public Health (Ophthalmia Neonatorum) Regulations.

The outstanding feature in this Table is the increased number of notified cases of Scarlet Fever.

Shewing number of cases of Infectious Diseases notified from 1896 to 1914.

Disease.	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Smallpox .....	...	...	...	...	23	...	49	92	2	4	...	1	...	2	1	...	...	...	...
Diphtheria (in- cluding Mem- branous Croup)	25	15	77	229	334	284	83	132	60	157	166	150	100	102	96	107	55	76	62
Erysipelas ...	...	...	...	...	...	...	76	66	81	132	112	99	81	94	90	77	87	90	97
Scarlet Fever...	287	185	347	615	1476	1117	494	339	458	1578	849	544	595	1013	795	343	116	268	704
Enteric Fever	143	179	228	233	163	131	127	97	111	90	82	61	85	69	46	49	26	31	31
Puerperal Fever...	16	8	7	13	14	11	18	11	7	24	12	25	11	11	10	9	9	8	10
Typhus Fever	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Meningitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Poliomyelitis ..	...	..	...	...	...	...	...	...	..	...	...	...	..	...	...	...	4	1	...
Pulmonary Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	217	230	212
Other forms of Tuberculosis	...	...	...	...	...	...	..	...	...	...	...	...	...	...	..	...	...	104	60
Ophthalmia	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	15
Neonatorium	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...
Totals	471	388	659	1091	2010	1543	847	737	719	1985	1221	880	872	1291	1038	585	515	808	1191

TABLE XXVII.

Cases of Infectious Disease notified during the Year 1914.

NOTIFIABLE DISEASE.	Cases notified in whole District.							Total Cases notified in each Locality.											Total Cases removed to Hospital.				
	At Ages—Years.							St. Stephen's	Trinity	St. Michael's	St. John's	St. Silas'	St. Paul's	St. Peter's	St. Mary's	St. Matthew's	St. Thomas' Park	St. Luke's		St. Mark's	St. Andrew's		
	At all Ages	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65															65 and upwards	
Small-pox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	62	2	20	29	6	4	1	...	...	2	1	7	6	2	5	3	8	5	2	2	11	...
Erysipelas	97	2	1	2	16	39	33	4	...	2	4	4	7	6	5	8	13	6	9	9	9	...	
Scarlet Fever.....	704	5	147	460	69	23	...	...	61	22	32	56	55	31	38	51	73	39	54	60	98	...
Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	31	...	2	6	5	13	5	...	1	2	3	1	1	...	2	5	2	5	3	3	...	...
Puerperal Fever	10	...	...	...	3	7	...	...	2	1	...	2	3	...	1	...	...	...	1	...	...	...
Cerebro-spinal Meningitis .....	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis .....	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum	15	15	...	...	...	...	...	...	3	...	1	...	...	5	1	2	...	1	2	...	...	...
Pulmonary Tuberculosis	212	3	3	19	47	101	37	2	15	12	15	6	23	15	22	19	18	17	18	8	13	...	
Other forms of Tuberculosis	60	2	8	20	10	10	7	3	2	5	4	3	3	5	6	6	11	1	6	3	3	...	
TOTALS.....	1191	29	181	536	156	197	83	9	94	63	46	60	79	98	64	80	94	125	74	95	85	134	752

SMALLPOX AND VACCINATION.

There has been no case of Smallpox in the Borough during the year. The last case occurred in 1910.

As pointed out in previous Reports, the portion of the population of Blackburn which is susceptible to the infection of Smallpox is becoming considerably greater, owing to the increasing number of exemptions from vaccination obtained during recent years. Consequently, should the disease be introduced into the Borough, there will be a great risk of an extensive outbreak unless the early cases are immediately brought to the notice of the Health Department and their prompt isolation effected.

It will be seen from Table XXIX. that for recent years only one quarter of the children born have been successfully vaccinated.

TABLE XXVIII.

Smallpox

Year.	Cases Notified.	Deaths.	Mortality per 1,000 Population.
1883	4	0	·00
1884	0	0	·00
1885	4	0	·00
1886	28	2	·01
1887	42	4	·03
1888	98	10	·08
1889	0	0	·00
1890	0	0	·00
1891	0	0	·00
1892	4	2	·01
1893	79	8	·06
1894	13	0	·00
1895	0	0	·00
1896	0	0	·00
1897	0	0	·00
1898	0	0	·00
1899	0	0	·00
1900	13	2	·01
1901	0	0	·00
1902	49	2	·01
1903	92	3	·02
1904	2	0	·00
1905	4	0	·00
1906	0	0	·00
1907	1	0	·00
1908	0	0	·00
1909	2	0	·00
1910	1	1	·007
1911	0	0	·00
1912	0	0	·00
1913	0	0	·00
1914	0	0	·00

TABLE XXIX.

Vaccination — For 1896—1914.

Year	Births.	S'ccessfully Vaccinated	Died Un- vaccinated	Insus- ceptible	Postponed	Exempted	Removed out of Distri't and traced.	Removed and not traced.
1896	3552	2587	495	59	113	...	...	288
1897	3629	2301	451	17	137	...	...	723
1898	3662	2459	655	3	153	164	...	228
1899	3643	2616	519	9	191	139	51	118
1900	3438	2687	416	8	52	120	56	47
1901	3386	2640	408	18	76	158	19	40
1902	3357	2635	329	13	68	128	20	56
1903	3304	2330	304	20	53	117	24	28
1904	3100	2181	353	12	63	120	13	50
1905	3193	2274	290	17	39	190	7	29
1906	3418	2264	337	9	61	305	7	60
1907	3348	1828	311	4	57	407	9	70
1908	3415	1442	349	4	47	887	14	77
1909	3139	1200	244	7	44	980	3	7
1910	2948	996	234	3	32	1159	23	109
1911	2857	718	290	12	52	1233	26	463
1912	2741	689	213	10	25	1485	17	302
1913	2923	715	325	6	38	1491	4	13
1914	2814	778	276	3	36	1398	12	15

TABLE XXX.

Vaccination Returns for the Year 1914.

MONTH.	Births.	Vaccinations.	Exemptions.	Removals not traced.	Removed and traced out of district.	Insusceptible.	Postponements.	Unaccounted for not Vaccinated.	Died Unvaccinated.	Successfully Vaccinated each Quarter.
January ..	251	89	122	2	2	...	6	1	29	} 227
February	212	68	125	...	...	...	2	1	16
March	226	70	116	3	...	...	4	4	29
April	244	75	134	3	1	...	6	7	18	} 225
May.....	229	69	118	2	2	...	2	9	27	
June	243	81	122	1	...	1	1	9	28	
July	253	87	129	4	9	24	} 231
August ...	258	70	140	1	...	1	4	19	23	
September	245	74	118	1	2	...	1	23	26	
October ...	228	52	104	1	3	...	6	38	24	} 95
November	194	30	96	...	1	1	...	51	15	
December	231	13	74	1	1	...	...	124	17
Totals ...	2814	778	1398	15	12	3	36	295	276	778

SCARLET FEVER.

The number of cases notified during the year 1914 was 704, as compared with 268 during 1913, and 116 during 1912.

The following were the cases and deaths in age-periods during 1914 :—

Age period...	0-1	1-2	2-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	TOTAL
Cases ...	5	10	137	325	135	43	26	16	7	...	704
Deaths	...		6	4		...	...	...	..		10

Scarlet Fever has been prevalent in the Borough during the whole of the year, and although the general type of the disease continued to be mild, 10 deaths occurred among the 704 cases,, giving a case mortality of 1.4%. As in previous years, the mildness of the disease, however, has tended to its spread, many of the cases being so slight and indefinite as to remain undetected, and thus through non-isolation infecting others.

Owing to parents in some instances not calling in a doctor to cases of slight sore throat accompanied with perhaps only a faint rash, and owing to the symptoms in other instances being so indefinite that the doctors have hesitated to notify the cases until the peeling has determined their nature, many cases of Scarlet Fever have not been notified to the Health Department until the disease was well advanced, and considerable spread of infection has occurred through insufficient precautions and isolation having been taken at home.

Of the 704 cases notified,

119 cases were reported on the 1st day of the rash.

231	„	„	2nd	„
158	„	„	3rd	„
71	„	„	4th	„
24	„	„	5th	„
19	„	„	6th	„

and the remaining 82 cases were not reported until the 7th to the 34th day after the appearance of the rash.

As with the majority of infectious diseases, the early days of illness are those during which infection is chiefly given off, and until parents take prompt action in calling in a doctor immediately any rash appears, and until full precautions are taken with respect to doubtful cases during the period required to clear up the definite nature of the illness, it will be impossible to prevent the spread of this disease. It would be very helpful if doctors would informally report to the Health Department doubtful cases, so that the taking of adequate precautions in the way of isolation could be more fully insured.

All children who were absent from School on account of sore throat and not under medical care, have been examined at the Health Office, in order to make sure that they were not suffering from a mild form of the disease. By this precaution several cases were detected and prevented from returning to school and spreading the disease.

The onset of Scarlet Fever is marked by vomiting, sore throat, and the general signs of feverishness. Within 36 hours, as a rule, the characteristic rash appears, but in the mild form of the disease the rash may be so slight as to

escape notice. It is, therefore, very necessary during the prevalence of Scarlet Fever for parents to seek medical aid in all cases of sore throat, especially if accompanied by vomiting and feverishness. Otherwise mild cases of the disease are sure to be overlooked.

It was found possible in June to close Finnington Hospital, which had been used during the latter part of 1913 and the early part of 1914 for convalescent cases of the disease, there having been difficulty during this period in providing sufficient accommodation at the Fever Hospital for all cases requiring isolation on account of one of the Scarlet Fever Pavilions being used for the treatment of Pulmonary Tuberculosis.

Within recent years those who have had large experience in dealing with Scarlet Fever have come to the very definite opinion that uncomplicated cases of the disease can be safely discharged from Hospital at the end of the 4th week of the disease, provided patients are not sent home directly from a ward containing acute or complicated cases of the disease. This policy has been adopted in this Borough during the latter part of the year with good results.

The parents are, however, requested to keep the discharged case away from other children as far as possible during the fortnight following their leaving Hospital, and the patients are also seen at the Health Office at the end of this period to ascertain if they are quite fit to return to School.

The following are the cases, arranged in months and quarters for 1914, and compared with similar cases for 1913 :—

	Jan.	Feb.	Mar.	Apl.	May	June
1914 :	75	82	82	46	62	53
1913 :	4	8	14	7	12	6

	July	Aug.	Sept.	Oct.	Nov.	Dec.
1914 :	71	54	32	38	57	52
1913 :	10	16	9	37	55	90

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
1914 :	229	161	157	147
1913 :	26	25	35	182

The percentages of cases of this disease removed to Hospital in the different months were as follow :—

Jan.	Feb.	Mar.	Apl.	May	June
75.3	67.0	78.0	80.4	77.4	84.9
July	Aug.	Sept.	Oct.	Nov.	Dec.
92.9	70.9	81.2	92.3	86.0	82.7

Also the number of cases in individual houses was as follows :—

In 1 house	there were 5 cases.
„ 2	„ 4 „
„ 17	„ 3 „
„ 65	„ 2 „
„ 506	„ was 1 case.

1 case occurred in the Infirmary.

3 cases occurred in the Fever Hospital.

No milk supply was ascertained to have any effect in causing the spread of the disease during the year.

TABLE XXXI.

Scarlet Fever.

Year.	Cases notified.	Deaths.	Mortality per 1,000 population.
1879	.....	175	1'77
1880	.....	74	'72
1881	103	23	'22
1882	331	47	'44
1883	275	41	'38
1884	211	45	'41
1885	181	23	'20
1886	422	26	'23
1887	1695	157	1'38
1888	829	175	1'51
1889	737	123	1'05
1890	324	32	'26
1891	196	13	'10
1892	176	13	'10
1893	190	4	'03
1894	156	10	'07
1895	224	8	'06
1896	287	9	'06
1897	185	7	'05
1898	347	16	'12
1899	615	14	'10
1900	1476	83	'65
1901	1117	58	'44
1902	494	31	'23
1903	339	13	'09
1904	458	13	'09
1905	1578	76	'58
1906	849	33	'25
1907	544	21	'15
1908	595	20	'15
1909	1013	53	'40
1910	795	27	'20
1911	343	10	'07
1912	116	3	'02
1913	268	1	'007
1914	704	10	'07

DIPHTHERIA AND MEMBRANOUS CROUP.

The number of cases notified during the year was 62, compared with 76 during 1913 and 55 during 1912.

There were 7 deaths among the 62 cases, or a case mortality of 11.2 per cent., as compared with a case mortality 9.2 per cent. during 1913.

The death-rate from Diphtheria during 1914 was 0.05 per 1,000 of the population, being the same as that for the year 1913.

The following are the cases and deaths in age-periods :—

Age Periods in Years.	Notified Cases.		Deaths.	
0—1	2	2	1	1
1—2	2	20	1	5
2—3	7		3	
3—4	9		1	
4—5	2		0	
5—6	6	19	0	1
6—7	8		0	
7—8	2		1	
8—9	2		0	
9—10	1		0	
10—15	10	10	0	
15—20	3	3	0	
20—25	3	3	0	
25—35	2	2	0	
35—45	2	2	0	
45—55	1	1	0	
	<hr/> 62		<hr/> 7	

The following are the cases of Diphtheria, arranged in months, for the years 1913 and 1914 :—

	Jan.	Feb.	Mar.	Apl.	May	June
1913 :	4	0	1	3	2	4
1914 :	5	4	9	4	2	4

	July	Aug.	Sept.	Oct.	Nov.	Dec.
1914:	1	4	10	7	10	2
1913:	5	12	14	9	12	10

Total for 1914: 62.

Total for 1913: 76.

The following are the cases of Diphtheria, arranged in the four quarters of the year, since 1901:—

Year.	1st Quarter	2nd Quarter	3rd Quarter.	4th Quarter
1901	117	70	55	42
1902	19	17	20	27
1903	56	29	30	17
1904	22	12	7	19
1905	27	29	36	65
1906	51	28	46	41
1907	69	26	24	31
1908	23	23	18	36
1909	36	29	14	23
1910	16	18	24	38
1911	25	30	29	23
1912	19	14	12	10
1913	5	9	31	31
1914	18	10	15	19

These 62 cases occurred at 56 houses. Two cases occurred among the staff at the Fever Hospital.

The drains were tested at all these houses. Defects were found at 21 houses, and immediate steps taken to remedy the same.

Other insanitary conditions were also remedied.

Although these precautions are taken as regards the drains and other insanitary conditions, it is exceedingly probable that the chief cause of the spread of the disease is direct infection from a previous case. As occurs in connection with Scarlet Fever, the mild undetected cases are those which are responsible for the chief spread of the disease.

TABLE XXXII.

Cases of Diphtheria notified in Wards.

WARDS.	1905	1907	1908	1909	1910	1911	1912	1913	1914
St. Stephen's..	10	7	7	8	6	6	2	4	3
Trinity	20	13	2	3	3	3	3	1	5
St. Michael's..	19	14	4	10	4	...	3	5	2
St. John's	11	23	14	8	5	6	6	8	1
St. Silas'	9	20	24	13	3	21	3	1	7
St. Paul's	15	6	12	8	14	7	8	7	6
St. Peter's	1	3	4	4	3	3	...	7	2
St. Mary's	14	12	1	3	3	4	4	10	5
St. Matthew's.	12	10	5	9	5	4	3	8	3
St. Thomas' ...	6	12	3	3	4	8	3	7	8
Park	10	10	8	6	7	13	2	4	5
St. Luke's	6	5	3	5	4	4	2	...	2
St. Mark's	6	5	7	4	22	19	7	9	2
St. Andrew's	27	10	6	18	13	9	9	5	11
Totals...	166	150	100	102	96	107	55	76	62

BACTERIOLOGICAL DIAGNOSIS OF DIPHTHERIA.

Number of Swabbings taken by Medical Practitioners for Bacteriological Examination	197
Number of Swabbings taken by the Medical Prac- titioners before final disinfection	11

As the symptoms of Diphtheria are frequently very slight, and consist chiefly in sore throat, the remarks made under the heading of Scarlet Fever as to the need for the prompt calling in of a Medical Practitioner in cases of sore throat, also apply to Diphtheria. The failure to recognise any case of Diphtheria as such not only leads to the spread of infection but also jeopardises the patient's chances of recovery, as, for its success, anti-toxin requires to be given at the first onset of the disease.

One would like to see the more frequent appeal to bacteriology in cases of sore throat, for what appears to be an ordinary sore throat is often found, on bacteriological examination, to be due to Diphtheria.

TABLE XXXIII.

Diphtheria.

Year.	Cases Notified.	Deaths.	Mortality per 1,000 Population.
1884	.....	1	0'009
1885	.....	1	0'009
1886	.....	...	0'00
1887	.....	1	0'008
1888	.....	1	0'008
1889	4	4	0'03
1890	5	4	0'03
1891	1	...	0'00
1892	3	1	0'008
1893	3	2	0'01
1894	40	14	0'11
1895	31	7	0'05
1896	25	10	0'08
1897	15	5	0'04
1898	77	32	0'25
1899	229	74	0'58
1900	334	91	0'11
1901	284	62	0'47
1902	83	23	0'17
1903	132	26	0'19
1904	60	11	0'08
1905	157	33	0'25
1906	166	26	0'19
1907	150	17	0'12
1908	100	12	0'09
1909	102	18	0'13
1910	96	22	0'16
1911	107	28	0'21
1912	55	9	0'06
1913	76	7	0'05
1914	62	7	0'05

TYPHOID OR ENTERIC FEVER.

The number of cases notified during the year was 31, this being the same number as that for the year 1913.

There were 7 deaths during 1914, compared with 8 deaths during 1913, giving a case mortality of 22.5 per cent.

		Case	
Age	Cases	Mortality	
Periods.	Notified.	Deaths.	per cent.
0—1	0	0	0.0
1—2	0	0	0.0
2—3	0	0	0.0
3—4	1	0	0.0
4—5	1	0	0.0
5—6	0	0	0.0
6—7	1	0	0.0
7—8	1	0	0.0
8—9	0	0	0.0
9—10	1	0	0.0
10—15	3	0	0.0
15—20	2	0	0.0
20—25	3	2	66.6
25—35	4	1	25.0
35—45	9	2	22.2
45—55	2	0	0.0
55 & upwards...	3	2	66.6
	—	—	—
	31	7	22.5

Of the 31 notified cases, 13 were ascertained to have eaten shellfish, and not to have been exposed to any known source of infection.

In several of these 13 cases one hesitated to ascribe infection to the shellfish, because this was said to have been cooked, but on making further enquiries it was ascertained that the cooking was frequently insufficient to kill the germs present in the interior of the fish. As a rule the mussels and cockles are only subjected to momentary scalding with boiling water, which is immediately poured off the fish.

Under the powers given in the Blackburn Corporation Act, 1908, shellfish collected from certain beds which were found to be polluted with sewage were stopped from being sold within the Borough.

The drains at the 27 houses where these 31 cases occurred were tested. Defects were found at 12 houses, and immediate steps were taken to remedy the same.

The type of sanitary convenience at the infected houses was as follows :—

Water Closets.		Pail
Fresh-water.	Slop-water.	Closets.
12	4	11

Milk was not found to be a vehicle of infection in any series of cases.

TABLE XXXIV.

**Typhoid Fever in Wards and Quarters during 1914.
(Notification).**

Wards.	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Totals
St. Stephen's .....	...	...	...	1	1
Trinity .....	...	...	1	2	3
St. Michael's .....	...	...	...	2	2
St. John's	1	1	1	...	3
St. Silas'	1	...	...	...	1
St. Paul's .....	...	1	...	...	1
St. Peter's .....	...	...	...	...	...
St. Mary's .....	...	1	...	1	2
St. Matthew's	2	...	...	3	5
St. Thomas' .....	...	...	...	2	2
Park	1	3	...	1	5
St. Luke's ... ..	...	1	1	1	3
St. Mark's	1	...	1	1	3
St. Andrew's .....	...	...	...	...	...
Totals	6	7	4	14	31

The monthly notifications of this disease during 1914 were as follow :—

Jan.	Feb.	Mar.	Apl.	May	June
3	1	2	1	5	1
July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2	1	3	4	7
Total : 31.					

35 specimens of blood were submitted by the Medical Practitioners in the Borough for bacteriological examination, with the following results :—

Positive	.....	15
Negative	.....	20

The cases notified in the four quarters for the years 1899 to 1914 were as follow :—

	First	Second	Third	Fourth
	Quarter.	Quarter.	Quarter.	Quarter.
1899	..... 84	..... 26	..... 42	..... 81
1900	..... 34	..... 25	..... 27	..... 77
1901	..... 35	..... 24	..... 29	..... 43
1902	..... 33	..... 26	..... 18	..... 50
1903	..... 39	..... 23	..... 16	..... 19
1904	..... 26	..... 15	..... 13	..... 57
1905	..... 20	..... 18	..... 10	..... 42
1906	..... 25	..... 11	..... 3	..... 43
1907	..... 20	..... 10	..... 12	..... 19
1908	..... 18	..... 20	..... 12	..... 35
1909	..... 27	..... 9	..... 10	..... 23
1910	..... 12	..... 4	..... 8	..... 22
1911	..... 9	..... 7	..... 10	..... 23
1912	..... 8	..... 9	..... 6	..... 3
1913	..... 5	..... 1	..... 6	..... 19
1914	..... 6	..... 7	..... 4	..... 14

TABLE XXXV.

Typhoid Fever.

Year	Cases Notified.	Deaths.	Mortality per 1,000 Population.
1881	289	68	·65
1882	210	50	·47
1883	442	84	·78
1884	268	67	·61
1885	130	28	·25
1886	105	34	·30
1887	153	41	·36
1888	146	39	·33
1889	111	20	·17
1890	121	37	·31
1891	106	24	·19
1892	79	32	·26
1893	161	27	·22
1894	129	32	·26
1895	119	28	·22
1896	143	33	·26
1897	179	35	·28
1898	228	30	·23
1899	233	40	·31
1900	163	30	·23
1901	131	17	·13
1902	127	23	·17
1903	97	15	·11
1904	111	21	·16
1905	90	15	·11
1906	82	14	·10
1907	61	13	·09
1908	85	14	·10
1909	69	18	·13
1910	46	9	·06
1911	49	8	·06
1912	26	7	·05
1913	31	8	·05
1914	31	7	·05

Accommodation				CONDITION OF			Other Remarks.		
No.	No. of Days ill before notification after 1st case.	Cases of Typhoid occurring in same house	W.C.	Pail	Slopewater	Yard.			
						Back road.		Drainage.	
1	11	1	Flagged	Paved	Defective	Occurred in Fever Hospital. do. do.
2	17	...	1 ...	1 ...	...	Flagged	Paved	Good
3	10	...	...	1 ..	...	Flagged and cobbled	Paved	Good
4	19	...	1 ..	1 ...	...	Flagged	Paved	Defective
5	6	...	...	1 ...	...	Flagged and cobbled	Paved	Good
6	25	...	1 ...	1 ...	...	Asphalt	Paved	Defective
7	8	...	...	1 ...	1 ...	Flagged and cobbled	Paved	Defective
8	11	...	1 ..	1 ...	...	Cobbled	Flagged	Defective
9	...	...	...	...	...	..	...	...
10	...	...	...	...	...	...	...	...

Closet Accommodation										Other Remarks.
No.	No. of Days ill before notification after 1st case.	Cases of Typhoid occurring in same house	W.C.	Pail.	Slopwater	CONDITION OF				
						Yard.	Back road.	Drainage.		
11	38	1	...	Flagged	Flagged	Defective	Occurred in Royal Infirmary.	
12	13	...	1	...	...	Flagged	Paved	Defective
13	23	...	...	...	1	Flagged and cobbled	Flagged	Good
14	9	...	1	...	...	Flagged and cobbled	Paved	Good
15	15	...	...	1	...	Flagged	Paved	Good
16	22	...	...	1	...	Flagged	Paved	Defective
17	11	...	...	1	...	Flagged	Flagged	Good
18	9	...	1	...	...	Flagged and cobbled	Paved	Defective
19	14	...	...	1	...	Flagged	Paved	Good
20	...	...	...	...	...	...	...	...

No	No. of Days ill b'fore notification after 1st case.	Cases of Typhoid occurring in same house	W.C.	Pall.	Slopewater	CONDITION OF			Other Remarks
						Vard.	Back road.	Drainage.	
21	12	...	...	.	1	Flagged	Paved	Good	
22	13	...	1	...	...	Flagged	Paved	Good	
23	9	...	...	...	1	Flagged	Unpaved	Defective	
24	21	...	1	...	.	Flagged	Paved	Good	
25	12	...	...	1	...	Flagged	Paved	Good	
26	9	...	1	...	...	None	Paved	Defective	
27	23	...	1	...	1	Flagged	Flagged	Good	
28	7	...	1	...	...	Flagged	Flagged	Good	
29	13	Another case reported same day.	...	1	...	Cobbled	Flagged	Good	
30	4	...	1	...	...	Flagged	Paved	Defective	

ERYSIPELAS.

During 1914, 97 cases of Erysipelas were notified, and 3 deaths registered, giving a case mortality of 3.0 per cent.

PUERPERAL FEVER.

There were 10 notifications of Puerperal Fever received from Medical Practitioners during 1914, as compared with 8 during 1913.

6 of the cases terminated fatally.

MEASLES.

863 cases of Measles were reported from the Schools during the year, compared with 392 during 1913, and 938 during 1912.

The following Table gives the number of cases reported and the deaths per month during the year:—

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Cases Reported	68	190	164	220	96	29	30	...	3	8	35	20	863
Deaths ...	...	3	2	6	5	2	...	1	...	...	1	...	20

DEATHS IN AGE-PERIODS.

0—1	1—2	2—5	5—10	Total.
5	11	3	1	20

The death-rate from Measles during 1914 was 0.14, as compared with 0.07 during 1913.

It will be noticed in Table XI. that more deaths occurred from Measles than from any of the other acute infectious diseases.

The disease has caused considerable loss of school attendance during the year, and is more fully discussed in the Annual Report to the Education Committee.

The Infant Departments at the following Schools were closed during the year on account of the prevalence of Measles :—

St. Mary's R.C. (unprotected children)	Feb. 4 to Feb. 20
Emmanuel	,, 18 to Mar. 3
Mill Hill Council	,, 18 to ,, 3
St. Matthew's	,, 20 to ,, 7
St. Peter's R.C.	,, 21 to ,, 8
Audley Range (unprotected children, Class I.)	,, 21 to ,, 8
St. Joseph's R.C.	,, 21 to ,, 8
Moss Street (Classes 3 & 4)	Mar. 4 to ,, 19
Park Road	,, 23 until after Easter Holidays.
Bangor Street	April 6 ,, ,
Christ Church	,, 6 ,, ,
Maudsley Street	,, 6 ,, ,
Audley Range	,, 6 ,, ,
St. Barnabas'	,, 6 ,, ,
All Saints'	Nov. 13 to Nov. 28
St. Silas'	Dec. 3 until after Christmas Holidays.

TABLE XXXVII.

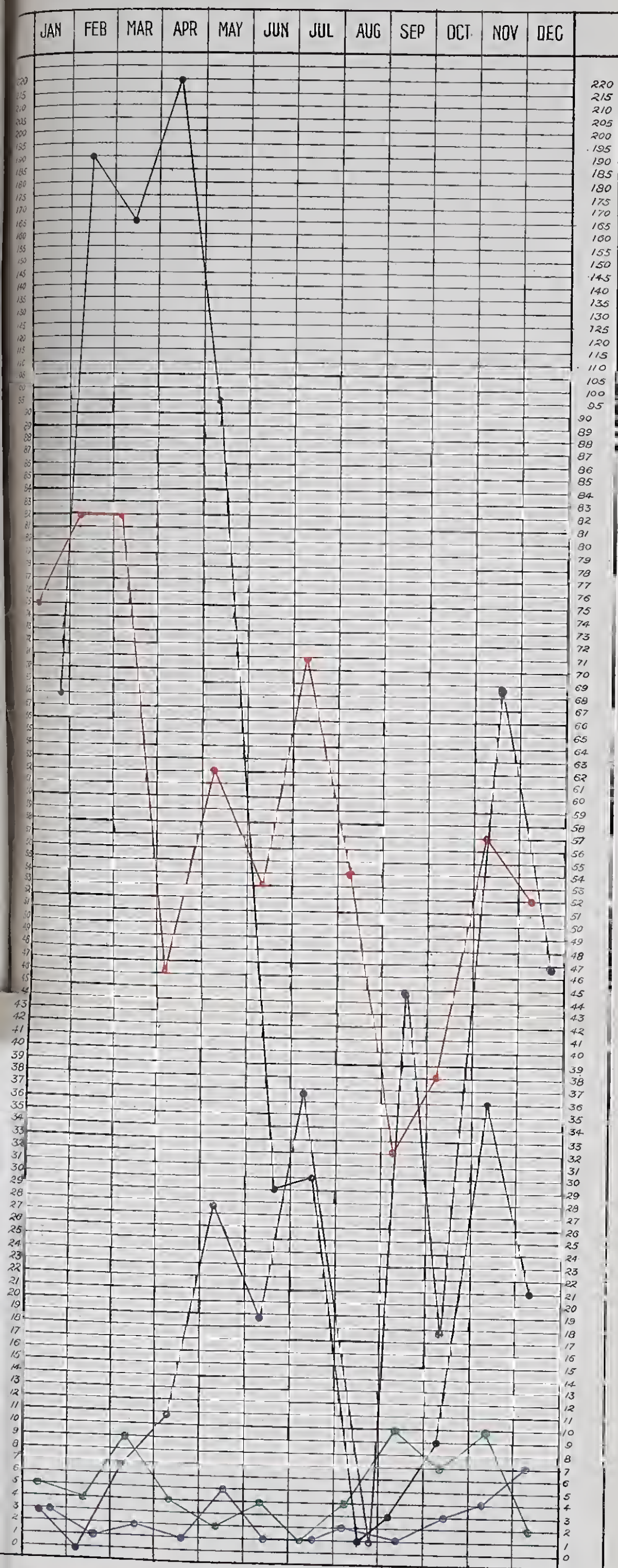
Deaths and Death Rates from Measles.

1871—1914.

Year	Total Deaths	Death Rate	Year	Total Deaths	Death Rate
1871	61	0·8	1893	140	1·1
1872	31	0·3	1894	13	0·01
1873	119	1·4	1895	324	2·5
1874	142	1·7	1896	36	0·2
1875	29	0·3	1897	143	1·0
1876	167	1·9	1898	50	0·38
1877	48	0·5	1899	40	0·29
1878	25	0·2	1900	76	0·55
1879	37	0·3	1901	94	0·72
1880	74	0·7	1902	77	0·59
1881	9	0·08	1903	53	0·40
1882	167	1·5	1904	60	0·45
1883	1	0·009	1905	42	0·32
1884	92	0·8	1906	63	0·48
1885	1	0·009	1907	45	0·34
1886	195	1·7	1908	15	0·11
1887	76	0·6	1909	41	0·30
1888	117	1·0	1910	39	0·29
1889	188	1·6	1911	28	0·21
1890	15	0·1	1912	52	0·38
1891	173	1·4	1913	10	0·07
1892	8	0·06	1914	20	0·14

CHART 2.

Infectious Diseases.



Red - Scarlet Fever:

Green - Diphtheria

Blue - Typhoid Fever:

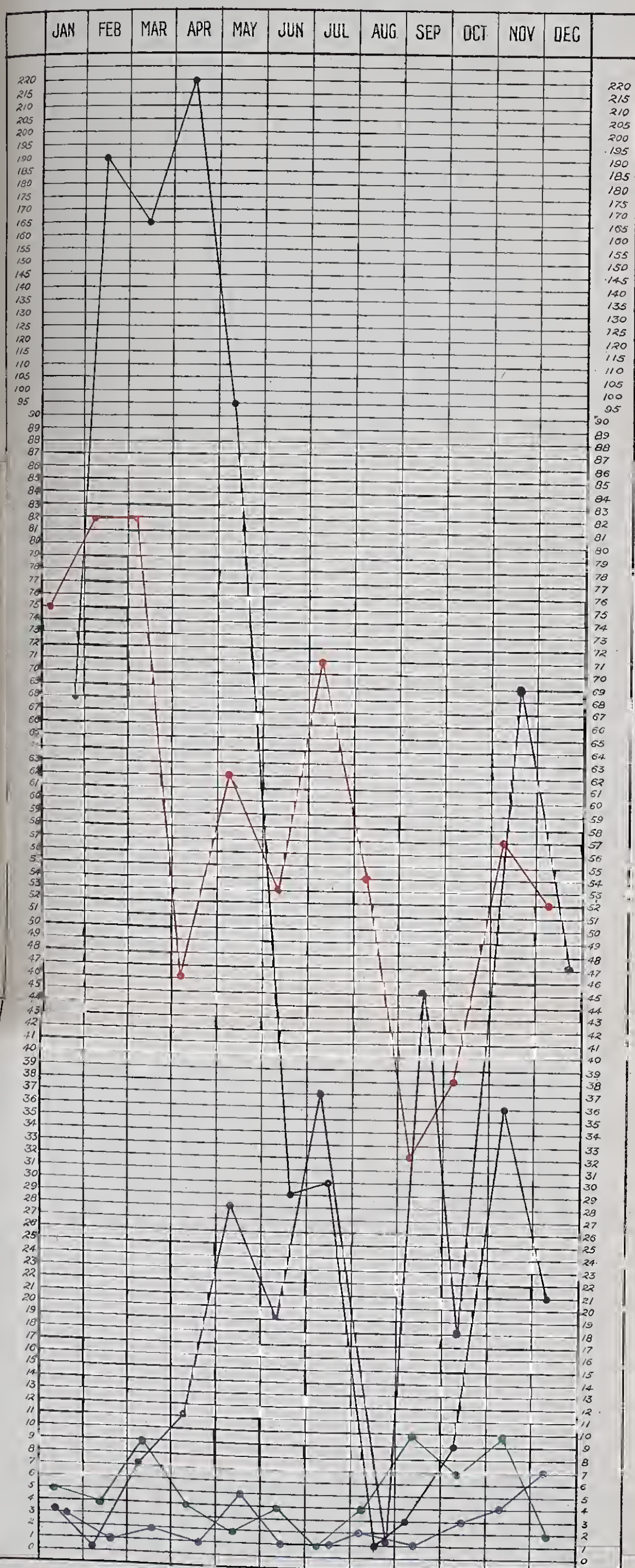
Black - Measles.

Purple - Whooping Cough.



CHART 2.

Infectious Diseases.



Red - Scarlet Fever.

Green - Diphtheria.

Blue - Typhoid Fever.

Black - Measles.

Purple - Whooping Cough.

WHOOPIING COUGH.

There were 9 deaths from Whooping Cough during 1914, as compared with 7 during 1913 and 27 during 1912.

These 9 deaths occurred in the following age-periods :—

0—1	1—2	2—5	5—10
6	1	2	0

Mill Hill Council Infants' School was closed on account of the prevalence of this disease from December 18th until after the Christmas Holidays.

TUBERCULOSIS.

There were 156 deaths from Tuberculosis during 1914, as compared with 137 during 1913.

Of these 156 deaths, 124 were due to Tuberculosis of the Lungs.

During 1914 the death-rate from all forms of Tuberculosis was 1.16 per 1,000 of population, and from Pulmonary Tuberculosis 0.92 per 1,000.

During the year 272 notifications of cases of Tuberculosis were received from Medical Practitioners, compared with 334 received during 1913.

Of the 272 notifications received, 212 were cases of Tuberculosis of the Lungs, and 60 were cases of Tuberculosis in other organs of the body.

The following Table gives a Summary of the Notifications received from Institutions during the year :—

INSTITUTION.	Admitted	Discharged
Tuberculosis Wards, Blackburn Infectious Diseases Hospital	90	87
Meathop Sanatorium, Grange-over-Sands	35	34
Blackburn Union Infirmary.....	19	13
Burnley Union Infirmary .....	...	1
Townley Hospital, Farnworth	1	1
Brompton Hospital, London .....	...	2
Fairlight Sanatorium	1	...

In several instances a patient has been transferred from one institution to another, and therefore the same case may appear under the heading of more than one institution.

TABLE XXXVIII.

Deaths from Tuberculosis for Ten Years.

	1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.		1913.		1914.	
	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate
General Tuberculosis..	17	0·12	14	0·10	8	0·05	15	0·11	9	0·06	12	0·08	11	0·08	..	..	..	..	..	..
Tabes Mesenterica ...	27	0·20	34	0·25	36	0·26	28	0·20	23	0·16	22	0·16	13	0·09	15	0·11	21	0·15	10	0·07
Tubercular Meningitis	33	0·24	24	0·17	36	0·26	16	0·11	22	0·16	15	0·10	13	0·09	8	0·05	12	0·08	12	0·08
Phthisis	142	1·06	124	0·92	133	0·98	148	1·09	136	0·99	110	0·80	119	0·89	109	0·81	88	0·65	124	0·92
Other Forms	7	0·05	6	0·04	9	0·06	10	0·07	9	0·06	7	0·05	8	0·06	10	0·07	16	0·11	10	0·07
Total	226	1·70	202	1·51	222	1·65	217	1·60	199	1·46	166	1·21	164	1·23	142	1·06	137	1·02	156	1·16

TABLE XXXIX.

Pulmonary Tuberculosis in Blackburn.

Year.	Deaths.	Death Rate (per 1,000).	
1881	1.90	1.720
1882 .....	.....	1.80
1883 .....	.....	1.90
1884 .....	.....	1.70
1885	1.30	1.624
1886 .....	.....	1.80
1887 .....	.....	1.50
1888 .....	.....	1.50
1889	187	1.52	1.206
1890	214	1.80	
1891	163	1.35	
1892	132	1.09	
1893	134	1.10	1.182
1894	148	1.20	
1895	160	1.29	
1896	142	1.14	
1897	149	1.19	1.070
1898	154	1.22	
1899	152	1.20	
1900	148	1.16	
1901	150	1.17	0.956
1902	163	1.25	
1903	122	0.93	
1904	125	0.94	
1905	142	1.06	0.80
1906	124	0.92	
1907	133	0.98	
1908	148	1.09	
1909	136	0.99	0.81
1910	110	0.80	
1911	119	0.89	
1912	109	0.81	
1913	88	0.65	0.92
1914	124	0.92	

Number of Cases notified	{	Males	123	}	212
		Females	89		

[illegible]

B.—Non-Pulmonary Tuberculosis.

Number of Cases investigated	{	Males	21	}	37
		Females	16		

Number of cases investigated during the year.	Age Periods.										Occupations.										No. of family in household				N. in house			No. of rooms					Furnished room	Cleanliness			Ventilation			Income of family at the time of investigation.										Tuberculosis in other members of family				
	Under 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Cotton Workers	Other factory hands (not Cotton)	Labourers	Shopkeepers and Assistants	Clerks	At School or under School age	Foundry Workers	Painters	Carters	Coal Miners	Other occupations	Dressmakers and Machinists	Housewives	1 (lodger)	2 to 4	5 to 7	8 and over	2 to 4	5 to 7	8 and over	3	4		5	6	over 6	Good	Fair	Bad	Good	Fair	Bad	Under 20/-	20/- and under 25/-	25/- and under 30/-	30/- and under 35/-	35/- and under 40/-	40/- and under 50/-	50/- and under 60/-		60/- and over	Not ascertained	Living on charity	
MALES 21 cases	2	4	3	2	2	4	...	4	7	3	1	9	1	1	23	10	3	17	16	4	15	9	8	3	...	2	24	8	5	9	25	3	8	5	6	2	3	3	4	2	4	...	1
FEMALES 16 cases.....	5	2	3	2	1	3	5	1	...	9	1	...	1	23	10	3	17	16	4	15	9	8	3	...	2	24	8	5	9	25	3	8	5	6	2	3	3	4	2	4	...	1

From the foregoing figures it will be seen that the death-rate from Tuberculosis, and especially that from the Pulmonary form of the disease was somewhat higher during the year than during the two or three preceding years.

It has been attempted in Table XL. to give a comprehensive view of the conditions attending the disease in Blackburn. The particulars set forth in this Table were obtained by the four Health Visitors on the investigation of each notified case. The home of each case is visited immediately after notification, the particulars enumerated are obtained and general advice is given as regards cleanliness, ventilation and the adoption of measures to prevent the spread of the disease to others. It is interesting to note that 12 per cent. of the cases of Pulmonary Tuberculosis occurred among children under 14 years of age.

The frequent occurrence of the disease among large families and in households with small accommodation is shown. As was to be expected also, the table confirms the association of Tuberculosis and poverty. Under these circumstances it is very evident that adequate treatment and isolation at home is practically impossible.

TREATMENT.

The provision for the treatment and isolation of patients suffering from the disease was the same as during the preceding year. 26 beds were set aside for advanced cases in a pavilion at the Infectious Diseases Hospital, and 12 beds were reserved at Meathop Sanatorium for early cases.

The need for greater provision in this respect has been under the consideration of the Health Committee and towards the end of the year about 20 acres of ground were purchased adjoining the Infectious Diseases Hospital. On this site it is proposed to erect buildings for the accommodation of 60 patients.

Table XLII. gives a subsequent history of Blackburn patients treated in Meathop Sanatorium since 1908, and it will be seen that of the 130 patients whom it has been possible to follow up 40 per cent. are alive and well, 25.5 per cent. are alive but still suffering from the disease, and that 34.5 per cent. have died.

In considering these figures it is necessary to bear in mind that only patients in the early stages of the disease have been sent to Meathop, and that, moreover, 19 of the 52 patients who are still alive and well have left the Sanatorium for less than a year. The permanent benefit, therefore, to be obtained under present conditions from treatment in Sanatorium, even as regards patients in the early stage of the disease, cannot be said to be very marked. Their return to those unfavourable conditions as regards occupation and environment, which had probably played an important part in bringing about the disease, is a frequent obstacle to the permanent good results of the treatment, and the following up of treatment in Sanatorium by some system of after-care which will place the patient under more favourable conditions on his return from the Sanatorium is much to be desired.

As regards the Wards set aside at the Infectious Diseases Hospital for cases of Pulmonary Tuberculosis, the main objects in view are :—

1. To isolate advanced cases which are likely to be a source of danger to others if left at home.
2. To improve the condition of the less advanced cases, so that they may for a time return to useful work.
3. To train patients during their stay in Hospital in the mode of living which is most beneficial for themselves and in the precautions it is necessary for them to take when they leave the Institution in order to prevent the spread of their disease to others.

TABLE XLI.
Treatment of Pulmonary Tuberculosis.—Meathop Sanatorium.

	ADMISSIONS.						DISCHARGES.									
	Age Periods.						Stage of Disease.			N. I. Act.		Number of cases.	Condition of Patients on Discharge.			
	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	Early	Moderately advanced	Advanced	Insured	Not insured		Disease arrested	Condition improved	No improvement	Average stay in Sanatorium
Males (27 cases)	1	1	8	8	6	3	7	20	...	24	3	27	19	7	1	100.0 days
Females..... (12 cases)	1	1	5	4	1	...	7	5	...	11	1	11	6	5	...	134.1 days

TABLE XLI.—Continued.

Fever Hospital (Tuberculosis Wards).

	ADMISSIONS.										DISCHARGES.										
	Age Periods.						Stage of Disease				N. I. Act.		Number of cases.	Condition of Patients on Discharge.							
	10 to 15		20 to 25		35 to 45		45 to 55		Early	Moderately advanced	Ad- vanced	Insured		Not insured	Disease apparently arrested	Improved	No improve- ment	Disease advancing	Died	Transferred to Meathop	Average stay in Hospital
	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55															
Males..... (44 cases)	1	2	13	8	11	9	...	15	29	41	3	38	1	23	1	1	12	6	74.0 days		
Females..... (46 cases)	7	4	5	16	8	6	1	14	31	32	14	48	5	32	5	...	6	5	117.7 days		

TABLE XLII.

The subsequent history of Blackburn patients treated at Meathop Sanatorium since 1908.

MALES.

FEMALES.

Condition of disease on discharge	Number of Patients	Average period of treatment	Number of Patients apparently quite well after having been discharged from Sanatorium for								Number of patients alive but still suffering from the disease, having been discharged from Sanatorium for								Deaths, the patients having lived the following number of years after discharge: from Sanatorium.								Number of patients of whom no particulars can be obtained		Number of Patients	Average period of treatment	Number of patients apparently quite well after having been discharged from Sanatorium for								Number of patients alive but still suffering from the disease, having been discharged from Sanatorium for								Deaths, the patients having lived the following numbers of years after discharge from Sanatorium								Number of patients of whom no particulars can be obtained																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
			6 years and over	5 years and under 6	4 years and under 5	3 years and under 4	2 years and under 3	1 year and under 2	Less than 1 year	6 years and over	5 years and under 6	4 years and under 5	3 years and under 4	2 years and under 3	1 year and under 2	Less than 1 year	Not ascertained	6 years and over	5 years and under 6	4 years and under 5	3 years and under 4	2 years and under 3	1 year and under 2	Less than 1 year	Not ascertained	6 years and over					5 years and under 6	4 years and under 5	3 years and under 4	2 years and under 3	1 year and under 2	Less than 1 year	Not ascertained																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Arrested	38	DAYS 104'0	5	1	3	9	10	1	3	1	2	3	Arrested	8	DAYS 165'2	2	2	1	1	1</

In addition to the above :—

- 6 males left at their own request and against the advice of the Medical Superintendent, after an average stay of 21 days.
- 2 males were discharged for disciplinary reasons after an average stay of 21 days.
- 1 male died in the Sanatorium after 92 days treatment.
- 1 male was discharged after 57 days as not suffering from Pulmonary Tuberculosis.

In addition to the above :—

- 1 female died in the Sanatorium after 31 days treatment.
- 2 females were discharged after an average stay of 31.5 days, as not suffering from Pulmonary Tuberculosis.

TUBERCULOSIS DISPENSARY.

As during previous years, a room in the Offices of the Health Department has been used for the Dispensary, but a special building is in course of erection in Duke Street for this purpose.

The Tuberculosis Officer, Dr. Ewing, having been called away on active service at the beginning of the War, Dr. Young, who is the Assistant School Medical Officer, has temporarily carried out the duties of Tuberculosis Officer.

The number of persons examined at the Dispensary during the year was as follows :—

	Males.		Females.		Total.
Insured persons	92	.....	52	.....	144
Non-insured persons ...	19	.....	19	.....	38
	—		—		—
	111		71		182

The total number of persons attending the Dispensary for treatment or for observation was 90, and the patients made a total number of 219 attendances.

8 persons were treated with Tuberculin.

INFANTILE DIARRHŒA AND ENTERITIS.

The deaths from Diarrhœa and Enteritis of children under 2 years of age were 43, as compared with 115 during the year 1913.

36 deaths from Diarrhœa occurred amongst children under 12 months of age, and enquiries were made at the homes as to the feeding of the infant, occupation of the mother, means of storing milk and food, and sanitary condition of premises.

The ages of the children at death were as follows :—

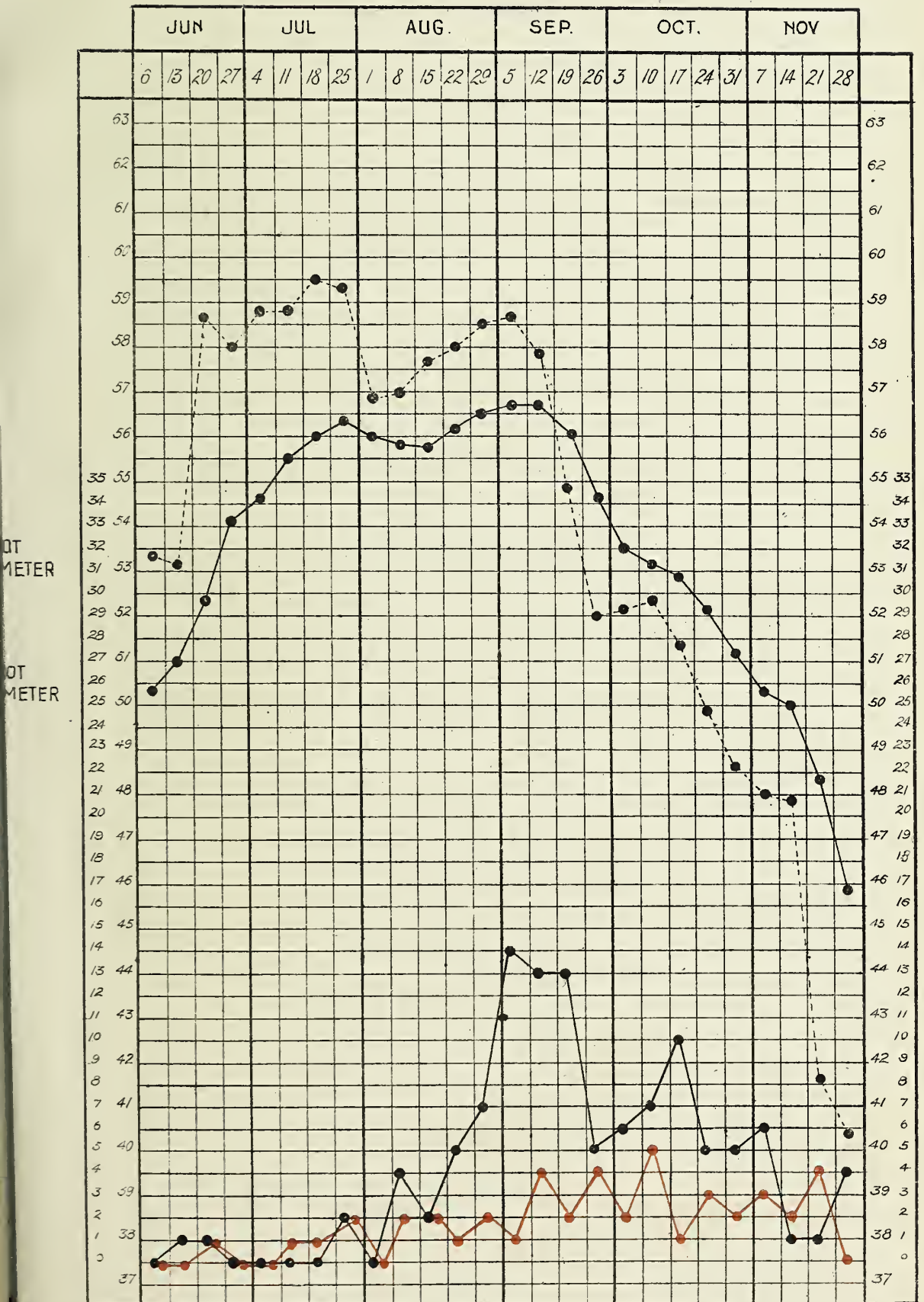
Under 1 month	2
1 month and under 3 months	13
3 months and under 6 months	9
6 months and under 9 months	6
9 months and under 12 months	6

The mother was engaged in home duties in 22 instances, and in work away from home in 14. In only 6 instances were the children entirely breast fed. At 19 houses there were fresh-water closets; at 3 houses there were slop-water closets; and at 14 there were pail closets.

As regards the storing of food, in only 3 instances was food kept in a special pantry; in 16 instances the food was stored on shelves in the scullery; in 13 instances it was kept in the cupboard or on the shelves in the kitchen; and in 4 instances the food was placed anywhere convenient in the room.

CHART 3.

Diarrhœa.



RED LINE - DEATHS 1914.

BLACK LINE - DEATHS 1913

CANCER.

There were 134 deaths from Cancer during the year, as compared with 139 during 1913.

The classification of the Certificates of Death from Cancer is as follows :—

Carcinoma	102
Epithelioma	2
Rodent Ulcer	1
Sarcoma	9
Malignant Disease	20

DEATHS FROM CANCER—1889-1914.

Year.	Males.	Females.	Total.
1889	20	32	52
1890	14	24	38
1891	19	34	53
1892	14	38	52
1893	23	37	60
1894	23	34	57
1895	33	48	81
1896	25	56	81
1897	28	44	72
1898	36	58	94
1899	28	52	80
1900	33	65	98
1901	27	64	91
1902	40	51	91

DEATHS FROM CANCER.—continued.

Year.	Males.	Females.	Total.
1903	35	57	92
1904	33	74	107
1905	46	67	113
1906	36	72	108
1907	45	68	113
1908	43	65	108
1909	43	64	107
1910	33	94	127
1911	40	73	113
1912	52	76	128
1913	64	75	139
1914	58	76	134

INFLUENZA, BRONCHITIS, AND PNEUMONIA.

The number of deaths from Bronchitis and Pneumonia was 438, as compared with 412 in 1913 and 396 in 1912. The deaths from Influenza were 24, as compared with 35 during 1913 and 20 during 1912.

DISINFECTION.

1,115 rooms were sprayed with Formalin at 926 houses, after cases of infectious disease.

913 visits to infected houses were made for the purpose of supplying disinfectants, and 20 typhoid-pails were collected and their contents burnt at the Destructor.

The following articles were disinfected by steam :—

1,420	Beds.
991	Mattresses.
1,053	Bolsters.
1,810	Pillows.
1,857	Quilts.
2,254	Blankets.
1,023	Sheets.
352	Suits.
568	Carpets.
767	Rugs.
938	Curtains.
7,791	Sundries.

The following articles were removed to the Destructor and destroyed by consent of owners :—31 beds, 67 mattresses, 12 bolsters, 12 pillows, 1 quilt, 6 sheets, 3 suits, 4 carpets, 1 rug, 2 curtains, 69 sundries.

DISINFECTANTS.

The following quantities of disinfectants have been used by the Health Department during 1914 :—

1. Chloros, 1,002 gallons.
2. Chloride of Lime, 2 tons 2 cwt.
3. Sanitary Dry Lime, 4,480 7lb. bags.
4. Carbolic Powder, 120 gross.

The quantity of disinfectants used is by no means a criterion of the amount of valuable work performed in their use. As a matter of fact, it is often very much otherwise,

and, the more disinfectants are employed, the more insanitary conditions are frequently found to have been perpetuated by their use.

Although, therefore, disinfectants, when used properly, are articles of the utmost value, they may be easily a source of danger when put to improper use.

The chief use of a disinfectant is to destroy infection, namely, the germs of infectious disease. It is well known, however, that disinfectants will destroy, or prevent the formation of, foul-smelling gases which arise from the decomposition of animal and vegetable matter and which are frequently associated with defective sanitary conditions.

Now, if there is a defect which gives rise to a nuisance, the only proper method of dealing with that nuisance is to remedy the defect. But, unfortunately, the nuisance is often mitigated by the use of disinfectants and the real defect allowed to continue.

For instance, a defective gully will probably give rise to a nuisance the evident part of which, namely, the smell, can be to a certain extent suppressed by the application of a disinfecting or deodorising substance. The defect in the gully, however, still remains, and the real danger from the defect is in no wise lessened through the evident part having been mitigated by the use of one of these articles. In such a case, therefore, the use of a disinfectant is a direct danger to the public, for by destroying the smell a very useful danger-signal that something is wrong has been done away with.

As a rule, general cleanliness and good ventilation are far more efficacious in preventing the spread of infectious disease than the haphazard use of disinfectants. These should

be reserved for special application to known infection, when they must be used with due care and full regard to their limitations. It is useless to expect disinfectants to act as a safeguard in the absence of ordinary sanitary measures.

The following points must be borne in mind in using a disinfectant :—

- (1) The disinfectant chosen must be suitable for the special conditions of the case.
- (2) It must be used in sufficient strength and must be allowed adequate time to act on the infected matter.
- (3) It must be intimately mixed with the matter to be disinfected, and as a rule this can only obtain when the disinfectant is in the liquid form.

“ Disinfecting Powders ” are therefore of little practical use as disinfectants—they act chiefly as deodorisers.

FEVER HOSPITAL.

The Fever Hospital is situated in Park Lee Road on an open site of $10\frac{1}{2}$ acres, at a height of 560 feet above sea-level.

Full particulars appeared in the Annual Report for 1903 respecting cost, buildings, number of beds, &c. The Administrative Block was extended in 1913, at a cost of £2,000.

The following Table gives an analysis of the number of patients admitted to the Fever Hospital during 1914, the number of deaths, and other details.

It will be observed that the average number of beds occupied was 76.9, as compared with 35.9 for the previous year.

The average number of days each patient stayed in Hospital was 45.1.

Table XLIII.—Fever Hospital

Notified Disease.	Patients remaining in hospital on January 1st, 1914.			Patients admitted and discharged during 1914.			Patients remaining in hospital on January 1st, 1915.			Analysis of all cases admitted in 1914, whether discharged or not during the year.				Average No. of Beds occupied during 1914.
	Total	Recov-ered.	Died.	Total	Recov-ered.	Died.	Total	Recov-ered.	Died.	Total	Recov-ered.	Died.	Average days in Hospital	
Scarlet Fever ...	87	87	...	494	488	6	65	66	...	560	554	6	44.2	67.8
Enteric Fever...	13	12	1	16	15	1	10	9	1	26	24	2	54.0	3.8
Diphtheria	12	12	...	32	30	2	5	5	...	37	35	2	53.3	5.4
Totals	112	111	1	542	533	9	81	80	1	623	613	10	45.1	76.9

SCARLET FEVER.

The total number of cases admitted during the year as Scarlet Fever was 560. Of these, 6 were found not to be suffering from Scarlet Fever, leaving 554 true cases admitted as such.

Of these 6 negative cases—

3 were cases of German Measles.

1 was a case of Measles.

1 was a case of Erythema.

1 was a case of Tonsillitis.

The case of Measles died from Broncho-Pneumonia.

One case admitted as Diphtheria was found to be suffering from Scarlet Fever. Four cases were suffering from Scarlet Fever and Diphtheria concurrently on admission. One case of Scarlet Fever also had Chickenpox on admission; 2 had Mumps, 1 had Measles, and 1 German Measles.

11 Patients contracted Chickenpox in Hospital.

6 deaths occurred, giving a case mortality of 1.0 per cent.

The Convalescent Scarlet Fever Pavilion (26 beds) is still being used for patients suffering from Pulmonary Tuberculosis. Both patients insured under the National Insurance Act and non-insured patients are receiving treatment, and the cost of the insured patients is being borne by the Blackburn Insurance Committee.

RETURN CASES.

In 28 instances an inmate of the household developed Scarlet Fever within 28 days of the return of a case of the disease from Hospital, giving a percentage of 4.8 return cases.

This somewhat high percentage of return cases was partly due to the impossibility to provide a separate non-infected ward for the patients about to be discharged, owing to the large number of acute cases in Hospital, and partly to the difficulty in the majority of households of preventing the discharged case immediately coming in contact and often sleeping with the other children at home.

The following complications and sequelæ occurred amongst the Scarlet Fever patients:—

Rhinitis	92
Otorrhœa	65
Albuminuria	27
Adenitis	25
Adenitis (suppurative)	8
Nephritis	10
Arthritis	9
Pericarditis	1
Septic Finger	1
Cardiac Dilatation	1
Tuberculous Peritonitis	1
Purpura Hæmorrhagica	1
Acute Pulmonary Tuberculosis	1
Pneumonia	1
Mastoid Abscess (superficial)	1

TYPHOID FEVER.

The total number of cases admitted to the Hospital certified as Typhoid Fever was 26.

6 of these were found not to be suffering from this disease, leaving 20 true cases of Typhoid Fever.

Of the 6 negative cases, 2 were suffering from Colitis, 1 from Tubercular Meningitis, 1 from Progressive Anæmia, and 2 from indefinite illnesses.

The cases of Tubercular Meningitis and Progressive Anæmia died; 1 of the cases of Colitis also died.

Among the 20 true cases of Typhoid Fever there were 2 deaths, showing a case mortality of 10 per cent., as compared with 29 per cent. last year.

The following complications and sequelæ occurred :—

Relapse	5
Phlebitis	4
Abscesses	2
Hæmorrhage	1

DIPHTHERIA.

37 cases were admitted to the Hospital certified as suffering from Diphtheria.

1 case admitted as Diphtheria was found to be Scarlet Fever. 4 cases were suffering from Scarlet Fever and Diphtheria concurrently.

Of the 36 true cases, 14 were laryngeal cases.

Tracheotomy was performed on 6 of these 14 cases, and 4 recovered.

Among the 36 cases of Diphtheria there were 2 deaths, showing a case mortality of 5.5 per cent., as compared with 12 per cent. last year.

The following complications and sequelæ occurred :—

Paralysis of Palate	5
Paralysis of Heart	3
Arthritis	1
Otorrhœa	1
Rhinitis	1

1 case contracted Enteric Fever.

FEVER HOSPITAL BACTERIOLOGICAL LABORATORY.

The following work has been carried out at the Fever Hospital Laboratory during the year :—

Positive. Negative. Total.

For the detection of Diphtheria Bacilli—

Swabs for diagnosis of cases in

Hospital	25	...	38	...	63
----------------	----	-----	----	-----	----

Swabs from cases under private

medical practitioners	37	...	171	...	208
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Swabs from cases before dis-

treatment in Hospital	90	...	101	...	191
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For the detection of Tubercle Bacilli—

Sputum sent by private medical

practitioners	69	...	258	...	327
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Sputum from patients under

treatment in Hospital	90	...	101	...	191
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Udders sent by the Veterinary

Inspector	12	...	1	...	13
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Cerebro Spinal Fluid	1	...	0	...	1
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Pleural Effusion	0	...	1	...	1
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	276		645		921
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FACTORIES AND WORKSHOPS.

Full attention has been paid during the year to the administration of The Factory and Workshop Act of 1901.

One of the Inspectors, namely, Inspector Kenyon, devotes his whole time to this work.

Table XLV., on page 110, shows that there were 818 workshops on the register at the end of the year, and they contained 1,000 rooms, 37 of which were underground.

The register in 1914 showed a decrease of 29 workshops as compared with those existing in 1913.

The approximate number of males employed in these workshops was 1,423, and of females 1,138, as compared with 1,508 males and 1,183 females in 1913.

The visits to factories numbered 180, and to workshops 1,206, as compared with 267 and 1,353 such visits during 1913.

The following Table gives a summary of the visits paid during the year to factories, workshops, etc. :—

Table XLIV.—Summary of Visits during 1914.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Factories.....	20	10	20	15	19	8	17	15	4	14	13	25	180
Workshops	40	12	144	202	161	125	110	132	32	153	59	36	1206
Workplaces	5	7	9	4	3	3	22	3	1	6	8	5	76
Outworkers .....	...	...	10	24	...	...	...	...	8	...	...	...	42
Offensive Trades	11	2	13	4	12	5	10	13	3	15	10	21	119
Complaints—Nuisances Investigated.....	2	6	2	2	17	5	7	5	5	2	8	7	68
Food-preparing and Storing Places.....	14	...	9	1	9	4	7	7	...	11	10	13	85
Work in Progress.....	20	7	18	26	8	14	36	18	4	6	2	21	180
Drains Tested	2	5	...	5	...	...	15	3	...	...	...	...	30
Total	114	49	225	283	229	164	224	196	57	207	110	128	1986

In Table XLV. are enumerated the defective conditions (100 in number) found to exist in the various premises visited. In Table XLVI. it will be seen that 152 defects have been remedied during the year, this number including 80 defects standing over from 1913. There were thus 28 defective conditions under notice at the end of 1914.

I.—SANITARY CONDITIONS AT WORKSHOPS.

(a) *Cleanliness.*

Five workshops were found to have dirty floors or windows and 42 rooms required limewashing at the Inspector's visit.

(b) *Air Space.*

One room was found to be overcrowded.

(c) *Ventilation.*

One workroom was found to be deficient in ventilation.

(d) *Drainage of Floors on which Wet Processes are carried on.*

These processes include tripe-boiling, laundry work, &c., and the drainage of the floors has been so satisfactory that there has been no cause for complaint.

SANITARY CONVENIENCES IN WORKSHOPS.

The following is the character of the sanitary conveniences at the various workshops :—

684 Water-Closets.

173 Pail-Closets.

During 1914, notices for the provision of the following requirements were issued to 2 factories and 3 workshops :—

Repairs or reconstruction of sanitary conveniences at factories	4
Repairs or reconstruction of sanitary conveniences at workshops	3

SANITARY CONVENIENCES IN FACTORIES.

The following appears in Section 5, Factory and Workshop Act, 1901 :—

“ Where it appears to an Inspector that any act, neglect, or default in relation to any drain, water-closet, earth-closet, privy, ashpit, water supply, nuisance, or other matter in a factory or workshop, is punishable or remediable under the law relating to Public Health, but not under this Act, that Inspector shall give notice in writing of the act, neglect, or default to the District Council in whose district the factory or workshop is situate, and it shall be the duty of the District Council to make such inquiry into the subject of the notice, and take such action thereon as seems to that Council proper for the purpose of enforcing the law, and to inform the Inspector of the proceedings taken in consequence of the notice.”

40 notifications under this Section 5 of the Factory and Workshop Act, 1901, have been received from H.M. Inspectors.

3 of these referred to factories, and 37 to workshops; the nuisances notified are included in Table XLV.

Due inquiries were made into the matters brought to my notice, and such action taken as was deemed necessary.

The following list shows the matters referred to in the various notices received from H.M. Inspectors in connection with Factories and Workshops :—

	Factories. Workshops.	
No. of rooms requiring ventilation	—	1
„ rooms requiring limewashing or cleansing	—	26
„ rooms having dirty floors or windows	—	1
„ general repairs	—	6
„ closets to be replaced and in want of repair	—	1
„ closets badly lighted or ventilated	2	--
„ defective flushing apparatus	2	--
„ closets to be cleansed and lime- washed	—	9
„ sanitary accommodation for sexes not separated	—	1
„ rooms overcrowded	—	1

In addition to the above notifications received from H.M. Inspectors, one complaint has been sent to me from another source, and has received attention.

UNDERGROUND ROOMS.

There were 37 underground rooms on the register for 1914, including those used by bakers, as compared with 38 in 1913.

BAKEHOUSES.

There were 192 premises on the Workshop Register as wholesale, retail, and domestic retail bakehouses, or as sugar-boiling establishments.

These trades are carried on in 211 rooms, of which 4 are underground. 2 other underground bakehouses, which had been approved by the Local Authority, were not in use as bakehouses during the year.

103 males and 297 females are employed in the baking industry of this town.

In 23 of these bakehouses both sexes are employed.

24 notices have been issued with regard to insanitary conditions and defects.

UNDERGROUND BAKEHOUSES.

In use at the end of 1903	21
Closed during 1904	9
„ „ 1905	5
„ „ 1906	1
„ „ 1907	0
„ „ 1908	0
„ „ 1909	0
„ „ 1910	0
Untenanted at the end of 1913 and 1914	2
	— 17
	—
In use at the end of 1914	4

WORKPLACES.

The term "Workplace" is not defined in the Act, but it includes places where two or more persons meet regularly to perform some work, such work not being the making, altering, repairing, ornamenting, finishing, or adapting for sale of any article.

In connection with these places, 76 visits have been paid for the purpose of seeing that the provisions of the Factory and Workshop Act, 1901, had been complied with, and 1 defective condition was dealt with.

FOOD-PREPARING PLACES.

Under this heading are included all pork butchers' shops and other places (not including workshops) in which meat pies, black-puddings, sausages, potted meats, tongues, &c., are prepared for human consumption.

During the year 85 visits have been paid to these places, and the conditions generally have been found to be fairly satisfactory.

RESTAURANTS.

The kitchens of restaurants, hotels, and dining-rooms are included under the heading of "Workplaces."

The inspection of these places has been included in the visits to food-preparing places.

THE RECORD OF OUTWORKERS.

Lists of outworkers were sent in twice during the year by 20 employers, and once during the year by 15 employers.

42 visits were paid to dwellings where outworkers carried on their work. The greater part of this work is, however, carried on in premises which constitute workshops.

MARINE STORES.

This matter has been reported fully on in previous reports.

It would be a great advantage if all marine store dealers were subject to registration, and if bye-laws were made for regulating the duration of the license.

Insanitary conditions on their premises could then be dealt with more effectually.

It is very desirable that all marine stores should be subject to Section 112 of the Public Health Act, *i.e.*, that before a person can open a marine store he must obtain the written consent of the Council, upon the recommendation of the Medical Officer of Health, such as applies to offensive trades.

OFFENSIVE TRADES.

There are 19 establishments in the Borough in which offensive trades are carried on.

The following is a list of the offensive trades :—

Tripe-boilers	7
Fat-melters	5
Gut-scrapers	2
Knackers	2
	—
	16

One tripe-boiling establishment has ceased to exist through disuse.

Four notices were issued to the aforementioned establishments.

TABLE XLV.

Particulars of Registers and Nuisances Found (Factories and Workshops).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
	Factories.	Workplace.	Outwks & C'tacts	Tailors.	Dressmakers.	Milliners.	Cloggers.	Bootmakers.	Curriers & Saddlers	Cabinet Makers and Carvers	Joiners & Masons	B'kers, Confectioners and Sugar Rollers.	Basketmakers	Black & White Smiths	Blind and Chairmakers	Brushmakers	Chemists and Photographers	Coopers and Coachbuilders	Cotton Waste Sorters and Upholsters	Scale Makers and Cycle Makers	Hosiery, Under-clothing, Shirtmakers	Polishers and Picture Framers.	Painters & Plumbers	Printers and Paper Bag Makers	Wirew'krs & Tanners	Wheelwrights	Offensive Trades and Marine Stores	Food Preparers	Miscellaneous	Total.		
No. of Workshops on Register	83	100	52	64	58	10	13	25	192	5	18	4	12	10	4	9	5	23	10	36	4	19	5	20	7	30	818		
No. of Rooms	120	119	56	76	63	14	22	26	211	5	21	4	21	18	4	15	5	24	13	41	5	23	11	32	15	36	1000		
No. of Underground Rooms	2	1	1	8	9	..	..	1	4	1	..	..	..	..	1	..	..	..	6	..	..	1	..	..	1	37	..		
Avg No. of Males employed	326	4	4	142	122	35	51	66	103	15	64	8	55	18	12	30	10	3	34	74	1	75	48	63	13	51	1423		
Avg. No. of Females employed	129	347	171	..	2	..	..	..	297	8	..	1	1	19	..	5	..	89	..	..	12	..	..	19	3	35	1138		
No. employing both sexes	50	1	..	..	2	..	..	..	23	3	..	..	1	5	..	1	..	4	6	..	1	..	7	1	4	100	..		
No. of rooms badly lighted	55	62	25	16	17	5	14	8	77	3	11	1	12	9	2	8	1	..	..	15	3	13	8	25	8	18	438		
No. of stoves without outlets...	
No. of rooms badly ventilated
No. requiring lime-washing or cleansing	6	2	2	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
No. of dirty floors or windows	2	2	..	..	..	17	..	1	..	1	..	..	..	..	..	..	..	1	2	..	1	6	..	42	..	
No. of yards and floor surfaces in bad repair	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	5	..	..
No. of drains defective	1	..	4	..	..
No. of Drains blocked	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
No. of insufficient downspouts and defective drainage.....
No. of defective slop pipes	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
No. of defective gullies & dish stones.
No. of gullies and drains inside places	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
No. of accumulations of refuse	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE XLV. — continued.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
No. ash receptacles and excreta pails to be emptied .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. without ash receptacles ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of low chimneys .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of defective soil pipes & urinals..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of general repairs .....	...	...	...	2	...	...	...	...	4	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	17
No. of closets to be replaced and in want of repair .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of closets badly lighted or ventilated	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2
No. of defective flushing apparatus..	2	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2
No. of closets cleansed & linewashed	...	...	...	3	...	...	...	1	1	1	2	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	13
No. insufficient closet accommodation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of san. accom. for sexes not separated .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of rooms overcrowded ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of floors insufficiently drained..	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illegal occupation of underground bakehouse.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Failure to affix Abstract.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of Water Closets .....	...	...	...	108	83	42	44	49	8	10	18	137	5	12	4	11	13	2	8	5	19	8	29	4	16	1	18	6	24	684
No. of Pail Closets ..	...	...	...	10	18	11	20	9	4	2	7	49	5	...	...	1	...	2	2	...	5	2	6	...	3	4	5	1	7	173
No. of Privies ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of Notifications received from H.M. Inspector	3	...	...	6	...	...	2	1	1	...	2	18	...	...	...	...	...	...	...	...	2	...	1	1	1	1	...	...	1	40
Notifications sent to H.M. Inspector ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No. of notices issued	3	1	...	7	1	2	2	3	1	1	3	24	...	1	...	2	...	...	...	...	2	...	1	1	2	1	4	5	...	67
Total	11	2	...	909	738	362	80	341	9	114	158	1165	42	133	22	118	92	27	78	26	189	73	210	34	156	83	201	68	207	6018

TABLE XLVII.

Copy of Table sent to the Home Office at the request of the Secretary of State.
ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR
1914 for the County Borough of Blackburn.

Factories, Workshops, Workplaces, and Homework.

1.—Inspection.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances

Premises.	Number of		
	Inspections.	Written Notices.	Prosecution
Factories (including Factory Laundries)	180	3	...
Workshops (including Workshop Laundries)	1206	63	...
Workplaces (other than Outworkers' Premises included in Part 3 of this Table)	76	1	...
Total	1462	67	...

2.—Defects Found.

Particulars.	No. of defects.			
	Found	Remedied	R'ferred to H.M. Inspector	No. of
<i>Nuisances under the Public Health Acts—</i>				
Want of cleanliness	47	57	...	...
Want of ventilation	1	2	...	...
Overcrowding... ..	1	1	...	...
Want of drainage of floors	2	2	...	...
Other nuisances	26	36	...	...
Sanitary accommodation { insufficient ... ..	...	8	...	...
{ unsuitable or defective ..	22	41	...	...
{ not separate for sexes ...	...	4	...	...
<i>Offences under the Factory and Workshop Act—</i>				
Illegal occupation of underground bakehouse... (S. 101)	...	...	...	...
Breach of special sanitary requirements for bakehouses (SS. 97 to 100)	1	1	...	...
Other offences: Sec. 133 ... ..	...	...	...	...
(Excluding offences relating to outwork which are included in Part 3 of this Table)...				
Total	100	* 152	...	...

*This number includes 80 defects standing over from 1913.

TABLE XLVI.

Nuisances Remedied at Factories and Workshops.

	Factories	Workplaces	Out Workers and Contractors	Tailors	Dressmakers	Milliners	Cloggers	Bootmakers	Curriers and Saddlers.	Cabinet Makers and Carvers	Joiners and Masons	Bakers, Confectioners and Sugar Boilers	Basket Makers	Black and White Smiths	Blind and Chair Makers	Brushmakers	Chemists and Photographers	Coopers and Coach-builders	Cotton Waste Sorters and Upholsters	Scale Makers and Cycle Makers	Hosiery, Underclothing and Shirtmakers	Polishers and Picture Framers	Painters and Plumbers	Printers and Paper Bag Makers	Witeworkers and Tanners.	Wheelwrights	Offensive Trades and Marine Stores	Food Preparers	Miscellaneous	TOTALS
Stoves Connected to Outer Air.....					1							1																		1
No. of Rooms Ventilated												1																		1
Internal Walls and Ceilings of Rooms Limewashed				9	2	2	2	1				19		1		2								1	2		1	8		50
Internal Floors, Windows and Walls of Rooms Cleansed				1			2					1															2	1		7
Inside Floors and Yards Badly Flagged or Paved, Repaired							1					1																1		3
Choked Drains (opened and cleansed)		1																												1
Defective Easing Troughs and Downspouts, Repaired	1																								1					3
Defective Sink Waste Pipes (short)				1								1																		1
Defective Trap Gullies and Dish Stones Replaced												1																		1
Accumulations of Refuse and other Debris Removed												1																		0
Gullies and Drains inside places removed												1																		1
Ash Receptacles Provided												1				2														2
Low Chimneys Raised																														0
Defective Soil-pipes and Urinals Repaired	1																													1
General Repairs not Detailed.....	11			2				6				5																1		25
Defective W.C.'s Repaired, Re-placed, or Reconstructed.....	3																													3
Water Closets Lighted or Ventilated	2																													2
Defective Connections and Fittings W.C. Flush Pipe to Pan, Repaired	2			1								1																		4
Closets Cleansed, Pans Cleansed, Walls and Tops Limewashed	18			3			1	1	1	1	2					1						1		1				1		31
Additional W.C.'s Provided	8																													8
Separate Sanitary Accommodation Provided for the Sexes	4																													4
Overcrowding Abated																					1									1
Floors Drained.....	1											1																		2
Illegal Occupation of Underground Bakehouses Rectified																														0
Failure to affix Abstract referred to H.M. Inspector.....																														0
No. of Defects Found, 100 ; Remedied, 152*	51	1		17	3	2	6	8	1	1	2	31		1		5					2			2	3		3	13		152

* This number includes 80 defects standing over from 1913.

TABLE XLVII.—*continued.*

3 --HOME WORK.

OUTWORKERS' LISTS, SECTION 107.										
NATURE OF WORK.	Lists received from Employers.						Notices served on Occupiers as to keeping or sending lists. 8	Prosecutions.		
	Twice in the year.			Once in the year.				Failing to keep or permit inspection of lists. 9	Failing to send lists. 10	
	Outworkers.			Outworkers.						
	Lists. 2	Con-tractors 3	Work-men 4	Lists. 5	Con-tractors 6	Work-men. 7				
(1)										
Wearing Apparel—										
(1) making, &c.....	20	35	45	15	25	5	...	...	...	...
(2) cleaning and wasling .....	...	...	...	...	...	...	...	...	...	...
Total	20	35	45	15	25	5	...	...	...	...

TABLE XLVII.—*continued.*

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year		Number.
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	Workshops	626
	Workshop Bakehouses.....	97 °
	Domestic Retail Bakehouses	95
Total number of Workshops on Register		818

5. - OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	—
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory & Workshop Act (s. 5))	40
Notified by H.M. Inspector	
Reports (of action taken) sent to H.M. Inspector	—
Other	—
Underground Bakehouses (s. 101) :—	
Certificates granted during the year	—
In use at the end of the year	4

COTTON OPERATIVES MORTALITY STATISTICS.

The following Tables show the death-rates amongst persons engaged in the Cotton industry of Blackburn, for the year 1914, and also the average rates for the period 1889 to 1914.

In the following Tables the Cotton Operatives have been divided into these four groups :—

1. Weavers.
2. Spinners.
3. Winders, Warpers, &c.
4. Card-room hands.

The general, phthisis, and respiratory (other than phthisis) death rates among these four groups for the year 1914 are given, and these rates are also compared with the corresponding rates since 1889.

The general death-rates among male and female weavers for the year 1914 are also set forth and compared with the rates for the preceding 9 years. The rates for the year 1905 were calculated on the 1901 Census figures; those for the years 1906 to 1910 on the mean between the 1901 and 1911 Census figures; and those for the years 1911 to 1914 on the 1911 Census figures. The retired operatives who were formerly in the Cotton trade are included in the figures.

The following rates have been worked from the 1911 Census figures, including the retired operatives.

Table XLVIII.—Deaths.

Age Periods.	Weavers	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	28	2	3	1	83
25 to 35.....	19	2	8	4	115
35 to 45.....	28	1	8	2	155
45 to 55.....	26	10	12	4	263
55 to 65.....	29	6	8	6	345
65 and upwards ...	33	6	2	1	495
Total	163	27	41	18	1456

Table XLIX.—Death Rates.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	2·7	1·8	1·4	1·9	3·2
25 to 35.....	2·5	3·9	4·3	8·9	4·7
35 to 45.....	6·3	2·9	6·4	6·7	8·2
45 to 55.....	11·5	24·3	14·8	14·7	18·1
55 to 65.....	32·3	29·7	21·5	69·7	39·6
65 and upwards ...	72·7	57·1	16·9	22·2	91·4
All Ages over 15 Years.....	6·3	10·3	6·3	10·7	15·0

Table L.—Phthisis—Deaths.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	7	0	0	0	22
25 to 35.....	3	1	2	1	34
35 to 45.....	5	0	2	0	28
45 to 55.....	3	0	1	0	22
55 to 65.....	0	0	0	1	4
65 and upwards.....	0	0	0	0	1
Total.....	18	1	5	2	111

Table LI.—Death Rates.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	0·6	0·0	0·0	0·0	0·8
25 to 35.....	0·4	1·9	1·0	2·2	1·4
35 to 45.....	1·1	0·0	1·6	0·0	1·4
45 to 55.....	1·3	0·0	1·2	0·0	1·5
55 to 65.....	0·0	0·0	0·0	11·6	0·4
65 and upwards.....	0·0	0·0	0·0	0·0	0·1
All Ages over 15 years...	0·7	0·4	0·7	1·1	1·1

**Table LII.—Respiratory Diseases other than
Phthisis.—Deaths**

Age Periods.	Weavers	Spinners.	Winders, Warpers, etc.	Card Room Hands.	Borough.
15 to 25	3	0	1	0	10
25 to 35	4	0	1	1	15
35 to 45	5	1	0	1	27
45 to 55	6	1	3	1	50
55 to 65	7	2	3	1	86
65 and upwards.....	5	0	0	0	124
Total	30	4	8	4	312

Table LIII —Death Rates.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, etc.	Card Room Hands.	Borough.
15 to 25	0·2	0·0	0·4	0·0	0·3
25 to 35	0·5	0·0	0·5	2·2	0·6
35 to 45	1·1	2·9	0·0	3·4	1·4
45 to 55	2·6	2·4	3·7	3·6	3·4
55 to 65	7·8	9·9	8·0	11·6	9·8
65 and upwards	11·0	0·0	0·0	0·0	22·9
All ages over 15 years ...	1·1	1·5	1·2	2·3	3·2

Table LIV.—Deaths from all causes from
1889 to 1914.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	904	93	229	56	2703
25 to 35	684	102	253	69	3332
35 to 45.....	703	125	224	90	4740
45 to 55	567	200	209	95	6014
55 to 65.....	617	179	165	72	7735
65 & upwards.....	808	319	190	67	11466
Total	4283	1018	1270	449	35990

Table LV.—Average Death Rates 1889 to 1914.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	3'3	3'4	4'3	4'0	4'1
25 to 35	3'5	7'8	5'3	5'9	5'3
35 to 45.....	6'0	14'2	6'9	11'7	9'7
45 to 55.....	9'6	18'7	9'9	13'4	15'9
55 to 65	26'4	34'0	17'1	32'2	34'1
65 & upwards.....	68'4	116'8	61'9	57'2	81'4
All Ages over 15 Years	6'4	14'9	7'6	10'3	14'3

Table LVI.—Phthisis, 1889 to 1914—Deaths.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	278	25	74	14	729
25 to 35.....	200	33	87	25	778
35 to 45.....	152	30	34	22	855
45 to 55.....	67	23	16	12	530
55 to 65.....	34	4	6	2	253
65 and upwards	3	3	4	0	48
Total	734	118	221	75	3193

Table LVII.—Average Death Rates, 1889 to 1914.

Age Periods.	Weavers.	Spinners.	Winders, Warpers, &c.	Card Room Hands	Borough.
15 to 25.....	1·0	0·9	1·4	1·0	1·1
25 to 35.....	1·0	2·5	1·8	2·1	1·2
35 to 45.....	1·3	3·4	1·0	2·8	1·7
45 to 55... ..	1·1	2·1	0·7	1·7	1·4
55 to 65.....	1·4	0·7	0·6	0·9	1·1
65 and upwards.....	0·2	1·1	1·3	0·0	0·3
All Ages over 15 years	1·1	1·7	1·3	1·7	1·2

Table LVIII.—Respiratory Diseases other than Phthisis, 1889 to 1914.—Deaths.

Age Periods.	Weavers	Spinners	Winders, Warpers, etc.	Card Room Hands.	Borough
15 to 25.....	87	14	32	5	396
25 to 35	91	21	28	9	564
35 to 45.....	120	23	42	19	971
45 to 55.....	149	48	47	34	1485
55 to 65.....	201	64	48	22	2280
65 and upwards.....	196	83	43	23	2950
Total.....	844	253	240	112	8646

Table LIX.—Average Death Rates, 1889 to 1914.

Age Periods.	Weavers	Spinners	Winders, Warpers, etc.	Card Room Hands.	Borough
15 to 25.....	0·3	0·5	0·6	0·3	0·6
25 to 35.....	0·4	1·6	0·5	0·7	0·9
35 to 45.....	1·0	2·6	1·3	2·3	2·0
45 to 55.....	2·5	4·5	2·2	4·8	3·9
55 to 65.....	8·6	12·2	4·9	9·8	10·0
65 and upwards.....	16·6	30·4	14·0	19·6	20·9
All ages over 15 years ...	1·2	3·7	1·4	2·5	3·4

Table LX—Death Rates of Male and Female Weavers for the Years 1905—1914

Age Periods.	1905		1906		1907		1908		1909		1910		1911		1912		1913		1914	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
15 to 25	8	14	10	26	7	16	11	17	5	20	16	14	6	25	10	21	13	18	5	23
25 to 35	9	19	6	15	9	11	2	10	6	30	3	23	8	27	7	16	8	14	7	12
35 to 45	10	17	5	16	13	7	13	10	13	16	6	20	12	14	17	13	11	19	12	16
45 to 55	9	7	11	12	16	11	16	9	16	10	11	19	12	16	14	8	18	14	13	13
55 to 65	14	7	10	10	13	5	15	1	17	7	13	17	11	9	9	17	24	11	23	6
65 and upwards	30	7	34	4	26	8	26	9	31	4	32	17	24	3	22	11	45	5	29	4

Table LXI.—Deaths of Male and Female Weavers for the Years 1905—1914.

Age Periods.	1905		1906		1907		1908		1909		1910		1911		1912		1913		1914	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
15 to 25...	2.7	1.9	3.4	3.5	2.4	2.1	3.7	2.3	1.7	2.7	5.5	1.9	2.0	3.4	3.1	2.9	4.1	2.5	1.5	3.2
25 to 35...	4.9	4.2	3.2	3.4	4.9	2.5	1.0	2.2	3.2	6.8	1.6	5.2	4.3	6.1	3.1	3.1	3.5	2.7	3.1	2.3
35 to 45...	7.3	7.9	3.9	7.5	10.2	3.2	10.2	4.6	10.2	7.5	4.7	9.3	9.4	6.5	10.3	4.6	6.6	6.8	7.2	5.7
45 to 55...	12.7	9.8	15.5	16.9	22.6	15.5	22.6	12.4	22.6	14.0	15.5	26.7	16.9	22.5	13.2	6.6	17.0	11.6	12.3	10.8
55 to 65...	32.2	31.9	23.0	45.6	29.9	22.8	34.5	4.5	39.1	31.9	29.9	77.6	25.3	41.1	16.2	49.5	43.3	32.0	41.5	17.4
65 & upds.	163.1	70.0	184.7	40.0	141.3	80.0	141.3	90.0	168.4	40.0	173.9	170.0	130.4	30.0	71.4	75.3	146.2	34.2	94.1	27.4

SALE OF FOOD AND DRUGS ACT.

During the year, 408 samples were purchased in Blackburn in the administration of the Food and Drugs Act, of which 351 were milk.

Of the total number of samples taken, 386 were found on analysis to be genuine.

As in former years, informal samples were purchased, and if any of these were found to be adulterated, formal samples were then purchased from the same vendors.

The following Tables are of interest as showing the average composition of milk sold in Blackburn in different months of the year.

Nearly all milk supplies coming into the Borough from outside districts were sampled, as well as milk from farms within the Borough.

THE PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

All the samples of Milk taken during the year were examined for preservatives, with negative results.

Table LXII.—Work under the Food & Drugs Acts

Articles Purchased.	Number Analysed.	Number Genuine.	Number Adulterated.	Extent or Adulteration.	Action taken.
Milk	351	330	21	5% deficient in cream.	Informal; a formal sample taken & found genuine.
				7% ,,	Do.
				6% ,,	Fined 10/- and 12/- costs.
				15% ,,	Fined £5 and 10/- costs.
				Slightly watered.	Another sample taken and found genuine. Warning letter from M.O.H.
				11% of added water.	Fined 40/- and 10/- costs.
				Very slightly deficient in cream.	Another sample taken.
				,, ,, ,,	Do.
				12% deficient in cream.	Fined 40/- and 12/- costs.
				3% of added water.	Informal; a formal sample taken & found genuine.
				8% deficient in cream.	Fined 40/- and 10/- costs.
				Slightly deficient in cream.	Another sample taken.
				Very slightly deficient in cream.	Do.
				,, ,, ,,	Another sample taken.
				12% deficient in cream.	Fined £3 and £1 13s. od. costs.
Carried forward	351	330	21		

Table LXII.—Food & Drugs—Continued.

Articles Analysed.	Number Analysed.	Number Genuine.	Number. Adulterated.	Extent of Adulteration,	Action taken.
Brought forw'rd Milk.....	351	330	21	Slightly deficient in cream.	Another sample taken.
				Very slightly de- ficient in cream.	Another sample taken and found genuine.
				„ „ „	Do.
				Slightly deficient in cream.	Do.
				10% of added water.	Fined £5 and 16/6 costs.
				11% deficient in cream.	Informal; another sample taken & found genuine.
Margarine	10	9	1	6% of Borates.	Warning letter from the M.O.H.
Butter	12	12			
Malt Vinegar	10	10			
Baking Powder	8	8			
Carried forward	391	369	22		

Table L XII. —Food & Drugs—Continued.

Articles Analysed.	Number Analysed.	Number Genuine.	Number Adulterated.	Extent of Adulteration.	Action taken.
Brought forward	391	369	22		
Ground Ginger	3	3			
Liquorice Powder	4	4			
Arrowroot..	3	3			
Jams	3	3			
Cream of Tartar	1	1			
Lard	2	2			
Coffee	1	1			
Total :	408	386	22		

98 samples of milk were purchased from farmers outside of the
Borough for bacteriological examination.

TABLE LXIII.

Average Amount of Fat and Non-Fatty Solids in
the Samples of Milk taken during 1914.

MONTH.	Number of Samples.	Average percentage of Fat.	Average percentage of Solids not Fat.
January	28	3.48	8.96
February	43	3.67	8.83
March	35	3.66	8.88
April	18	3.59	9.02
May	32	3.38	9.28
June	37	3.51	9.20
July	30	3.75	9.05
August	Laboratory closed.		
September	38	3.76	9.02
October	35	3.95	9.18
November	24	3.94	9.12
December	31	3.50	9.03
Total	351	3.65	9.05

It will be seen that the average percentage of fat in the samples obtained during the year was well above the 3% minimum fixed by the Board of Agriculture.

MILK SAMPLES BELOW THE MINIMUM FIXED BY THE
BOARD OF AGRICULTURE.

Month.	No.	Amount of fat %	Amount of other solids %	Action taken.
Jan.	4	2·85 2·72 2·81 2·55	8·75 9·23 9·29 9·23	Informal; formal taken and found genuine. Informal; formal taken and found genuine. Fined 10s. and 12s. costs. Fined £5 and 10s. costs.
Feb.	5	3·40 3·36 *2·92 *2·95 2·63	8·65 7·49 8·93 8·90 9·26	Letter from Medical Officer of Health; another sample taken and found genuine. Fined 40s. and 10s. costs. Another sample taken. From same farmer as previous sample. Fined 40s. and 12s. costs.
March	1	4·50	8·05	Informal; a formal sample taken and found genuine.
April	—	—	—	—
May	3	2·74 *2·87 *2·92	9·33 9·37 9·26	Fined 40s. and 10s. costs. Another sample taken. From same farmer as the previous sample.
June	4	2·90 2·62 *2·87 *2·90	9·35 9·14 9·16 9·50	Another sample taken. Fined £3 and £1 13s. 0d. costs; from same farmer as previous sample. Another sample taken. From same farmer as previous sample; another sample taken and found genuine.
July	1	2·92	9·08	Another sample taken and found genuine.
Aug.	—	—	—	—
Sept.	1	2·86	9·01	Another sample taken and found genuine.
Oct.	—	—	—	—
Nov.	1	2·94	7·04	Fined £5 and 16s. 6d. costs.
Dec.	1	2·67	9·13	Informal; a formal sample taken and found genuine.

* All these Samples from same farmer.

THE MILK SUPPLY.

No article of food takes so important a place in our dietary, especially during the early years of life, as milk; and yet none under present conditions is a more possible source of disease. The germs of Tuberculosis, Infantile Diarrhœa, Scarlet and Typhoid Fevers may all be carried in milk, which at the same time forms an excellent medium wherein they can grow and multiply.

No article of food, therefore, requires greater care in its collection, distribution and storage; but, unfortunately, it is very difficult to alter the practice of past generations and induce those concerned in the milk business to appreciate the need for those special precautions which modern science has shown to be necessary.

The Dairies, Cowsheds and Milkshops Orders, 1885-1899, gave Local Authorities a certain amount of control over the sanitary conditions of the cowsheds within their own respective districts, and a few progressive authorities, including Blackburn, have obtained special powers in local Acts of Parliament to deal with tuberculous milk supplied within their districts whether coming from farms within or without their districts.

The Tuberculosis Order, 1913, which came into force on May 1st of that year, required the notification of any cow having a tuberculous udder or an udder which is indurated or otherwise diseased, and of any bovine animal which is or appears to be suffering from tuberculosis with emaciation. The Order also enjoined the inspection of the cattle on the farm in question by a Veterinary Officer and the slaughter of any diseased animal, compensation being paid to the owner according to the agreed value of the animal and the stage of the disease. This Order was replaced in May, 1914, by the Tuberculosis Order, 1914, the latter Order simplifying

the valuation for compensation and extending the notification to cattle showing clinical signs of the disease. The 1914 Order was suspended in the month of August.

By the frequent systematic inspection of the dairy cattle by the Veterinary Inspector, a close supervision as regards Tuberculosis is exercised over the milk supplied from farms within this Borough, but a higher standard of cleanliness as regards the shippens, cows, and milkers, and greater attention on the part of farmers to abnormal udder conditions, are often greatly to be desired. A further advance would also be made towards a pure milk supply if milk were cooled immediately after its collection and adequately protected from contamination during its distribution.

There is no doubt that the present method of ladling out the milk from open cans in the dusty street is open to criticism.

Reference must also be made to the retail milkshop and to storage at the home.

At the retail milkshop there is very often opportunity for the further contamination of the milk, but in Blackburn the milk is taken, as a rule, in the farmer's cart direct to the consumer's house, and only a small proportion passes through the retail milkshop.

Finally there is the storage at the home, and the education of the people in the need for greater cleanliness as regards food generally, and especially milk, together with the provision of improved accommodation for the storage of food, can alone solve this part of the problem.

Were it not for the increased cost of the method, the distribution of milk, after cooling, in small stoppered bottles, containing the varying quantities required by the various households, would probably be the most hygienic course.

It is generally held that fresh, untreated milk, provided it is free from harmful germs, has definite advantages over sterilized milk, especially as a food for infants and young children, and it is therefore most essential that milk is so safeguarded from dirt and disease germs that it can be given to children with safety unsterilized. Under present conditions, however, it is far the safer course to boil all milk that is given to children.

It is unfortunate that the promised Milk and Dairies Act, which should have come into force at the end of the year, has been suspended.

The approximate number of cows housed within the Borough is 1,300.

The approximate number of cows supplying milk to the Borough from farms situated in outside districts is 3,750.

Samples have been taken regularly from the milk brought into the Borough from the surrounding districts, and have been submitted to bacteriological examination for tubercle bacilli. Of the 95 milk supplies examined, 6 were found to contain tubercle bacilli.

The farms supplying infected milk were visited by the Veterinary Inspector and the herds examined. Further samples of milk were taken from any cows giving evidence of tuberculosis and, if the bacteriological examination of any sample confirmed the presence of the disease, the farmer was ordered to isolate the cow from the herd and to cease sending the milk from that cow into the Borough.

At the same time the case was reported to the County Authority under the Tuberculosis Orders of 1913 or 1914.

The farms situated within the Borough have been regularly visited by the Veterinary Inspector and the herds

examined, special samples being taken from any cows showing any evidence of udder disease or of general tuberculosis.

The cowsheds and dairies were also inspected as to their general sanitary condition.

During the year 177 visits were paid to farms by the Veterinary Inspector, and 3,659 examinations of cows were made.

	Farms.	Cows.
Within the Borough	173	3,595
Outside the Borough	4	64
	<hr/>	<hr/>
Totals	177	3,659

10 cows were found suffering from Tuberculosis of the Udder, 4 being on 3 farms outside the Borough, and 6 on 6 farms within the Borough.

Of the 6 cases occurring in the Borough, 2 were notified by the owner, and the other 4 were found during the routine inspection of the Veterinary Inspector.

Of the cows examined on the dairy farms within the Borough, 20 showed definite abnormal conditions of the udder, 6 being due to Tuberculosis and 14 to Non-Tubercular Mastitis.

Only 2 cases of suspected Tuberculosis of the Udder were notified by the owners during the year under the Tuberculosis Orders of 1913 and 1914, and the disease in both cases was found to be Tuberculosis.

Three cases of "Tuberculosis with Emaciation" were dealt with. Two were reported by owners, and 1 was found by the Veterinary Inspector during his routine inspection.

TABLE LXIV.

Samples of Mixed Milk collected in the Borough
from Milk Carts bringing Milk into the Borough
from Farms outside.

Number of Sample.	Date of Collection	Number of Cows.	Result of Examination for tubercle bacilli.	
1	Jan 8	27	Negative.	Tested by inoculation.
2	„ 8	24	Do.	do.
3	„ 14	14	Do.	do.
4	„ 14	27	Do.	do.
5	„ 22	12	Do.	do.
6	„ 22	9	Do.	do.
7	„ 28	14	Do.	do.
8	„ 28	48	Do.	do.
9	Feb. 4	24	Do.	do.
10	„ 4	16	Do.	do.
11	„ 9	35	Positive.	Tested by inoculation.
12	„ 9	32	Negative.	Tested by inoculation.
13	„ 11	20	Do.	do.
14	„ 11	20	Do.	do.
15	„ 19	26	Positive.	Tested by inoculation.
16	„ 19	30	Negative.	Tested by inoculation.
17	„ 26	10	Do.	do.
18	„ 26	16	Do.	do.
19	Mar. 5	12	Do.	do.
20	„ 5	28	Do.	do.
21	„ 11	10	Do.	do.
22	„ 11	10	Do.	do.
23	„ 26	15	Do.	do.
24	„ 26	12	Positive.	Tested by inoculation.
25	Apr. 2	24	Negative.	Tested by inoculation.
26	„ 2	16	Do.	do.
27	„ 9	18	Do.	do.
28	„ 9	30	Do.	do.
29	„ 16	20	Positive.	Tested by inoculation.
30	„ 16	20	Negative.	Tested by inoculation.
31	May 4	12	Positive.	Tested by inoculation.
32	„ 4	23	Negative.	Tested by inoculation.
33	„ 22	24	Do.	do.
34	„ 8	11	Do.	do.
35	„ 8	23	Do.	do.
36	„ 14	22	Do.	do.

TABLE LXIV.—continued.

Number of Sample.	Date of Collection	Number of Cows.	Result of Examination for tubercle bacilli.	
37	May 14	15	Negative.	Tested by inoculation.
38	„ 21	16	Do.	do.
39	„ 21	14	Do.	do.
40	„ 28	18	Do.	do.
41	„ 28	16	Do.	do.
42	June 4	11	Do.	do.
43	„ 4	11	Positive.	Tested by inoculation.
44	„ 12	16	Negative.	Tested by inoculation.
45	„ 12	18	Do.	do.
46	„ 18	17	Do.	do.
47	„ 18	21	Do.	do.
48	„ 25	30	Do.	do.
49	July 1	22	Do.	do.
50	„ 2	12	Do.	do.
51	„ 2	13	Do.	do.
52	„ 8	19	Do.	do.
53	„ 8	16	Do.	do.
54	„ 15	13	Do.	do.
55	„ 15	16	Do.	do.
56	„ 29	14	Do.	do.
57	„ 29	17	Do.	do.
58	„ 30	30	Do.	do.
59	„ 30	8	Do.	do.
60	Sept. 10	11	Do.	do.
61	„ 10	17	Do.	do.
62	„ 23	13	Do.	do.
63	„ 23	12	Do.	do.
64	„ 23	15	Do.	do.
65	„ 23	17	Do.	do.
66	Oct. 1	10	Do.	do.
67	„ 1	20	Do.	do.
68	„ 8	20	Do.	do.
69	„ 8	9	Do.	do.
70	„ 12	40	Do.	do.
71	„ 12	27	Do.	do.
72	„ 16	27	Do.	do.
73	„ 16	19	Do.	do.
74	„ 20	13	Do.	do.

TABLE LXIV.—Continued.

Number of Sample.	Date of Collection	Number of Cows.	Result of Examination for tubercle bacilli.	
75	Oct. 23	20	Negative.	Tested by inoculation.
76	23	8	Do.	do.
77	29	20	Do.	do.
78	29	16	Do.	do.
79	Nov. 5	20	Do.	do.
80	5	14	Do.	do.
81	12	20	Do.	do.
82	16	15	Do.	do.
83	16	22	Do.	do.
84	30	35	Do.	do.
85	30	18	Do.	do.
86	Dec. 2	12	Do.	do.
87	3	22	Do.	do.
88	15	20	Do.	do.
89	15	28	Do.	do.
90	15	26	Do.	do.
91	17	11	Do.	do.
92	17	16	Do.	do.
93	21	14	Do.	do.
94	21	11	Do.	do.
95	22	16	Do.	do.

Samples of mixed milk from farms within the Borough were not taken, as the cattle on these farms were under the close supervision of the Veterinary Inspector, and samples were taken from any individual cow giving the slightest evidence of Tuberculosis.

SPECIAL SAMPLES OF MILK FROM INDIVIDUAL COWS WITH
ABNORMAL UDDERS AT FARMS OUTSIDE THE BOROUGH.

Number of Sample	Date of Collection	Evidence of Disease in Cow's Udder	Result of Examination for tubercle bacilli.
1	March 18th	Right posterior quarter indurated.	Positive, microscopically.

In addition to this work, which was carried out at the Manchester Bacteriological Laboratory, the Veterinary Inspector has examined microscopically, as a routine, milk from any abnormal udder and detected tubercle bacilli in the following 9 samples :—

Number of Sample	Date of Collection	Evidence of Disease in Cow's Udder.	Result of Examination for tubercle bacilli.
FARMS OUTSIDE THE BOROUGH.			
1	April 21st	Left posterior quarter hypertrophied.	Positive, microscopically.
2	May 11th	Right posterior quarter indurated.	Do. Do.
3	„ 28th	Right posterior quarter indurated.	Do. Do.
FARMS INSIDE THE BOROUGH.			
1	Jan. 12th	Left posterior quarter hypertrophied	Positive, microscopically.
2	Feb. 3rd	Right posterior quarter hypertrophied	Do. Do.
3	„ 17th	Right posterior quarter indurated.	Do. Do.
4	Mar. 4th	Right posterior quarter indurated	Do. Do.
5	May 14th	Right posterior quarter hypertrophied	Do. Do.
6	„ 27th	Right posterior quarter indurated	Do. Do.

MEAT INSPECTION.

Meat Inspection is carried out by the Veterinary Inspector, Mr. Burndred, M.R.C.V.S., who is the Chief Meat Inspector, and by the Assistant Meat Inspector, Mr. Goodman.

The total number of carcasses destroyed shows an increase of 11 carcasses when compared with the number destroyed during 1913.

The following are the figures relating to condemned carcasses during the last five years :—

	1910.	1911.	1912.	1913.	1914.
Beef	70 ...	72 ...	66 ...	75 ...	60
Mutton ...	114 ..	100½ ...	77 ...	61 ...	56
Veal	27 ...	64 ...	64 ...	51 ...	74
Pork	43 ...	32 ...	38 ...	21 ...	29
Goats	2 ...	1 ...	0 ...	0 ...	0

A total number of 13,418 beasts, calves and pigs were slaughtered during 1914, of which 309 were tuberculous, or a percentage of 2.3.

Similar percentages since 1903 have been :—

1903	5.1
1904	6.0
1905	5.8
1906	4.8
1907	4.3
1908	3.2
1909	2.7
1910	2.6
1911	2.0
1912	3.0
1913	2.32

There has thus been for the most part a progressive diminution in the amount of Tuberculosis amongst the animals slaughtered at the Blackburn Abattoir, but this does not necessarily indicate a general diminution of the disease in the country.

Tuberculosis was not present in any sheep out of a total number of 47,167 sheep slaughtered.

Of the above-named 309 tuberculous carcasses, 48, or 15.5 per cent., were totally rejected; 185 or 59.8 per cent. were cows and 29 of these, or 15.6 per cent., were rejected.

The percentages of tuberculous carcasses rejected during recent years are as follow :—

1908	.....	13.8
1909	.....	17.9
1910	.....	16.4
1911	.....	18.4
1912	.....	22.4
1913	.....	17.9
1914	.....	15.5

307 of the 309 tuberculous animals were affected with Tuberculosis of the Lungs.

Table LXVIII., showing the tuberculous udders found at the Public Abattoir, is interesting. Portions of these udders were examined microscopically and the presence of the disease confirmed.

7 of the 18 tuberculous udders were found in 3,003 cows slaughtered in the Abattoir, or 0.23 per cent.

The remaining 11 were from cows condemned for tuberculosis of the udder.

Similar percentages since 1908 have been as follow :—

1908	.....	0.06
1909	.....	0.7
1910	.....	0.4
1911	.....	0.5
1912	.....	0.8
1913	.....	0.73

10 of these 18 cows were giving milk on the day of slaughter.

Milk from 10 of these cows was sold in Blackburn, but in only 6 cases did the cows come from farms situated within the Borough.

Regarding the extent of the tuberculous process in these 18 cows, 7 exhibited the disease so extensively that they were totally rejected for human food.

During 1914 no private slaughter-houses were closed.

There are now 10 private slaughter-houses in Blackburn.

During 1914, 1,562 diseased carcasses were examined at the Public Abattoir and Private Slaughter-houses in the Borough, 219 of which were rejected and destroyed as unfit for human food. Compared with last year, this return shows an increase of 11 diseased carcasses.

During the year, 10,036lbs. of unsound meat, 244 rabbits, and a large quantity of fish were also destroyed. Compared with last year, this return shows a decrease of 1,654½lb. of meat and a decrease of 300 rabbits.

The total weight of the rejected carcasses, organs, meat, &c. (excluding fish) destroyed during the year was 41 tons 10 cwt.

The following Tables refer to the number of animals slaughtered at the Abattoir, the amount of meat brought to the Abattoir, the number of tuberculous carcasses and udders examined, the number of carcasses destroyed, and numerous other particulars relating to the inspection of meat and dairy cattle.

The number of diseased animals is greatly augmented by the presence of Distoma in the Liver of Cattle and Sheep, which necessitates the rejection of that organ.

TABLE LXV.
Number of Animals Slaughtered at the
Public Abattoir.

1914.	Beasts.	Sheep.	Calves.	Pigs.	Goats.
January	756	4118	66	812	...
February	525	3378	67	200	...
March	606	3423	144	150	...
April	494	4190	291	87	...
May	220	3351	87	281	...
June	430	3618	62	318	...
July	570	5112	159	271	...
August	455	3704	117	248	...
September	628	3993	129	289	...
October	858	4579	150	535	...
November	810	3614	84	583	...
December	971	4087	96	869	...
Totals	7323	47167	1452	4643	...

TABLE LXVI.
Number of Carcasses and Portions of Carcasses
Brought to the Abattoir.

1914.	CARCASSES.			BEEF.		
	Beef.	Mutton.	Pork.	Hind Quarters.	Buttocks	Clods.
January	9	...	...	...	...	...
February ...	92½	...	130	...	...	...
March .....	...	...	500	...	...	...
April	235	...	200	3	...	...
May	380	...	...	...	...	...
June	110	185	...	...	...	6
July	84	140	...	...	...	...
August	84	220	...	...	...	...
September	...	...	...	...	...	...
October ...	...	...	150	...	...	...
November	...	...	120	...	...	...
December...	...	...	200	...	...	...
Totals	994½	545	1300	3	...	6

Table LXVII. — Tuberculous Carcases Examined and Rejected.

1914.	Cows.		Heifers.		Bulls.		Bullocks.		Calves.		Sheep.		Pigs.		Totals.	
	Exam'd	Rejected	Exam'd	Rejected	Exam'd	Rejected	Exam'd	Rejected	Exam'd	Rejected	Exam'd	Rejected	Exam'd	Rejected	Exam'd	Rejected
January	24	2	...	...	1	1	...	...	...	...	...	...	3	...	28	3
February	18	3	1	...	2	...	1	...	...	...	...	...	11	...	33	3
March	22	1	1	1	...	...	2	...	1	1	...	...	6	2	32	5
April	13	1	1	1	2	...	...	...	...	...	...	...	5	...	21	2
May	13	4	...	...	...	...	...	...	...	...	...	...	8	...	21	4
June	10	3	...	...	2	...	...	...	...	...	...	...	11	1	23	4
July	13	5	...	...	1	...	1	1	...	...	...	...	8	1	23	7
August	13	2	...	...	1	...	...	...	...	...	...	...	5	1	19	3
September	15	1	...	...	...	...	1	...	1	1	...	...	11	4	28	6
October	16	...	...	...	...	...	...	...	...	...	...	...	9	1	25	1
November	10	2	2	1	1	1	...	...	...	...	...	...	13	...	26	4
December	18	5	2	...	...	...	...	...	...	...	...	...	10	1	30	6
Totals	185	29	7	3	10	2	5	1	2	2	...	...	100	11	309	48

Table LXVIII.—Tuberculosis Cows exhibiting Tuberculosis of the Mammary Glands.

1914	No. of Cow	Age	Where from	EXTENT OF THE TUBERCULOUS PROCESS.		Was she giving milk on the day of slaughter?	Was milk from the farm sold in Blackburn?	Result of examination of the carcase.	Under T.B. Order
				Generalized.	Localized.				
						Udder.			
Jan. 14	1	4 years	Blackburn	Yes	—	Right posterior quarter indurated	Yes	Rejected	Yes
" 22	2	Aged	Birkenhead	No	Yes	Right and left posterior quarters indurated	No	Passed	No
" 28	3	4 years	County	No	Yes	Right and left posterior quarters indurated	No	Passed	Yes
Feb. 10	4	4 years	Blackburn	Yes	No	Right anterior and posterior quarters indurated and hypertrophied	Yes	Rejected	Yes
" 18	5	4 years	Blackburn	No	Yes	Right posterior quarter indurated	Yes	Passed	Yes
Mar. 10	6	4 years	Blackburn	No	Yes	Left posterior quarter indurated	Yes	Passed	Yes
" 14	7	5 years	Annan	No	Yes	Left posterior quarter indurated	No	Passed	No
April 13	8	4 years	Oswaldtwistle..	No	Yes	Left posterior quarter indurated	Yes	Passed	Yes
May 20	9	4 years	Blackburn	No	Yes	Right posterior quarter hypertrophied	Yes	Passed	Yes
" 29	10	4 years	Blackburn	Yes	No	Right posterior quarter indurated	Yes	Rejected	Yes
June 1	11	Aged	Oswaldtwistle...	Yes	No	Right and left posterior quarters indurated	Yes	Rejected	Yes
" 4	12	Aged	Scotland	No	Yes	Right and left posterior quarters indurated	No	Passed	No
" 14	13	5 years	Livesey	Yes	No	Left posterior quarter indurated	Yes	Rejected	Yes
July 1	14	3 years	Little Harwood	Yes	No	Right posterior quarter indurated...	Yes	Rejected	Yes
Aug. 5	15	5 years	County	No	Yes	Left anterior and posterior quarters indurated	No	Passed	No
" 20	16	5 years	County	No	Yes	Right posterior quarter indurated...	No	Passed	No
Nov. 2	17	Aged	Birkenhead	No	Yes	Left posterior quarter indurated	No	Passed	No
" 5	18	5 years	Cattle Market...	Yes	No	Right and left posterior quarters indurated	No	Rejected	No

Table LXIX.—Tuberculosis in the Animals Slaughtered during the twelve months ending 31st December, 1914.

EXTENT OF THE TUBERCULOUS PROCESS.																
Kind of Animal.	Number Slaughtered.	Of which were Tuberculous	THORAX.				ABDOMEN.							Testicles	Bones	Udders
			Lungs	Heart and Pericardium	Serous Membranes	Livers	Stomachs	Spleens	Kidneys	Intestines	Uteri	Serous Membranes				
Cows	3003	185	185	40	86	108	51	32	35	51	1	42	...	...	18
Heifers ...	592	7	7	3	6	6	3	3	3	3	..	3	...	...	...
Bulls	1525	10	10	2	4	2	2	2	2	2	...	2	...	1	...	
Bullocks	2183	5	4	1	3	5	2	1	1	2	...	2	...	...	...
Calves	1452	2	2	...	2	2	...	...	..	...	...	2	...	...	..
Sheep .....	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Pigs	4643	100	99	...	3	98	12	12	...	..	...	...	2	...	...
Goats .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals.....	13398	309	307	46	104	221	70	50	41	58	1	51	2	1	18	

TABLE LXX.

Diseased Carcases Examined, Rejected and Destroyed for Diseases, Etc., other than Tuberculosis.—Carcases.

BEEF.	MUTTON.	VEAL.	PORK.
1 Anthrax	1 Apoplexy	40 Immature	7 Asphyxia
2 Asphyxia	8 Ascites	13 Joint-Ill	2 Gastritis
1 Rheumatism	14 Asphyxia	2 Jaundice	9 Swine Fever
8 Staggers	1 Anæmia	2 Nephritis	
6 Septicæmia	3 Emaciation	2 Septicæmia	
4 Septic Pneumonia	2 Enteritis	13 Unmarketable	
1 Septic Metritis	3 Ill bled		
2 Unmarketable	1 Jaundice		
	2 Parturition		
	1 Septic metritis		
	20 Unmarketable		
Totals 25	56	72	18

DISEASED ORGANS, &c., REJECTED AND DESTROYED.

1914	Heads.	Sets of Lungs.	Hearts.	Diaphragms.	Livers.	Stomachs	Spleens	Kidneys	Udders.	Intestines	Testicles.	Tongues.
For Tuberculosis ...	126	259	9	91	175	22	4	4	18	21	1	...
For Diseases other than Tuberculosis	1	95	19	1	1020½	36	...	10	30	30	...	...
Totals	127	354	28	92	1195½	58	4	14	48	51	1	..

DISEASED, BRUISED, PUTRID AND UNMARKETABLE MEAT
REJECTED AND DESTROYED APART FROM WHOLE CARCASSES.

1914.	Beef, Mutton, Pork and Veal.	lbs.
January	749
February	1030
March	750
April	420
May	396
June	1180
July	531
August	660
September	500
October	1490
November	1140
December	1190
Total		10,036

FISH EXAMINED, REJECTED AND DESTROYED.

1914	Fish.								
	Boxes	Barrels	Bags	Kits	Mussels	Cockles	Pots of Shrimps	Lbs. of Fish	Tins of Prawns
Totals	156	7½	35½	1	150 lbs	43 lbs	84	140	2

RABBITS, POULTRY, TINNED FOODS, FRUITS, ETC..
EXAMINED, REJECTED AND DESTROYED.

Rabbits	Tuberculous Fowl	Meat Pies	Bags of Sheep's Feet	Barrels of Tripe	Lambs' Plucks	Ducks
244	1	24	5	2	12	9

DESTRUCTION OF FRUIT.

3 cwt. of Tomatoes were destroyed.

NUMBER OF ANIMALS INSPECTED IN PRIVATE SLAUGHTER
HOUSES.

Beasts	Sheep	Calves	Pigs
2225	14459	474	137

WEIGHT OF REJECTED CARCASSES, ORGANS, MEAT, ETC.,
FORWARDED FOR DESTRUCTION DURING THE YEAR FROM THE
ABATTOIR TO AUDLEY DESTRUCTOR.

1914.	Tons.	Cwts.	Qrs.	Lbs.
January	2	8	2	0
February	2	18	0	0
March	6	13	0	0
April	1	12	0	0
May	1	13	0	0
June	3	15	0	0
July	4	4	3	0
August	3	2	2	0
September	2	13	2	0
October	2	14	2	0
November	3	18	3	0
December	5	16	2	0
	—	—	—	—
Total	41	10	0	0

NUMBER OF VISITS, 1914.

Butchers' Shops, &c.	3667
Private Slaughterhouses	1215
Meat Market	280
Fish Market	322
Public Abattoir	544
Railway Station	172
	—
Total	7200

Report of the Veterinary Inspector under the Diseases of Animals Acts and Orders for the Year 1914.

The year under review was notable for one of those recurrences of Foot and Mouth Disease which unfortunately visit us in Great Britain.

It is also noteworthy that Swine Fever continues to increase in spite of the efforts made to combat it.

The work in the Borough under the Diseases of Animals Acts and Orders was made more difficult in the latter part of the year by the suspension of the Tuberculosis Order 1914, and the Parasitic Mange Order 1911, in August.

ANTHRAX.

One case of this disease occurred during the year. The carcase of a cow was brought to the special slaughterhouse at the Abattoir from a farm within the Borough. While it was being dressed suspicious signs were noticed, so the dressing was suspended pending a bacteriological examination. Numerous Anthrax bacilli were found in the spleen, and the case was subsequently confirmed by the Veterinary Officers of the Board of Agriculture. The butchers were disinfected and all precautions taken, the carcase being cremated at Audley Destructor. I visited the farm the same day and subsequently, and found all the other cattle healthy.

During the year I made microscopical examinations of blood, &c., from the carcasses of 5 beasts, 28 sheep, and 3 pigs. In 1 case, that of the beast above referred to, Anthrax bacilli were found.

The Board of Agriculture Returns for 1914 show that during the year 722 outbreaks of Anthrax, confirmed by Veterinary Officers of the Board, occurred in Great Britain, in which 796 animals were affected

The figures for the four preceding years are :—

Year.	Outbreaks.	Animals affected.
1910	1465	1735
1911	908	1123
1912	743	840
1913	594	652

The following figures show the cases of Anthrax discovered and reported in Blackburn during the last 10 years :—

Years.	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Blackburn Cases	1	2	3	0	0	0	1	0	0	1
Outside Cases (Introduced)	4	3	9	0	5	2	1	1	2	0
Totals	5	5	12	0	5	2	2	1	2	1

TUBERCULOSIS.

The Tuberculosis Order 1913 was replaced on July 1st by the Tuberculosis Order 1914. This Order was a distinct improvement on the original one, as it recognised a form of Tuberculosis which is fairly common and a fruitful source of infection.

The following addition was made to the clause dealing with notification :—“ Any bovine animal which is suffering

from a chronic cough and showing definite clinical signs of tuberculosis." The valuation of the animal for compensation, which was rather complicated and unsatisfactory, was altered and replaced by a single valuation, that of the market value of the animal. Unfortunately, there has not been time to see the effects of this Order, as it was suspended on August 6th, 1914; but there is every reason to believe that, if efficiently administered throughout the country, it will have beneficial effect, and its re-introduction will be eagerly looked for.

TUBERCULOSIS OF THE UDDER.

During the year 6 cases of Tuberculosis of the Udder were dealt with in the Borough. Two of these were reported by owners; the other 4 were found by me, during my routine inspection.

They were all slaughtered at the Abattoir, and *post mortem* examination showed that 3 were affected with "advanced" Tuberculosis, and 3 with Tuberculosis but not in an advanced degree.

4 cases of Tuberculosis of the Udder were discovered on country farms, and were reported to the County Authority. In all 4 cases the animals were slaughtered at our Abattoir.

3 were affected with advanced Tuberculosis. 1 was affected with not advanced Tuberculosis.

TUBERCULOUS EMACIATION.

3 cases were dealt with during the year, 2 of which were reported, and the other found by me during my routine inspection.

All these cases came under the heading "Advanced Tuberculosis."

CLINICAL TUBERCULOSIS.

3 cases were dealt with after this form of the disease was made notifiable. In the first case the owner had the cow slaughtered during the period of detention, when it was found to be affected with advanced Tuberculosis.

The other 2 cases occurred after the Order was suspended. They were both, however, slaughtered, and were found to be affected with advanced Tuberculosis.

GLANDERS AND FARCY.

No cases of this disease occurred.

SHEEP SCAB.

The approximate number of fat sheep brought into Blackburn during the year was 47,167, and the number of store sheep exhibited at the Cattle Market was 410.

No case of Sheep Scab was reported or detected amongst them.

FOOT AND MOUTH DISEASE.

No cases occurred in the Borough.

In connection with outbreaks in Ireland, 42 premises were visited, and 632 beasts were examined, and were all found healthy.

The Board of Agriculture Returns for 1914 show that during the year 27 outbreaks of Foot and Mouth Disease occurred in Great Britain, the number of animals affected being 167.

SWINE FEVER.

Two outbreaks of this disease occurred during the year, one at the Irish detention lair adjoining the Abattoir; the other at a farm.

In connection with the outbreak at the farm, prosecution of the owner and 2 other persons was instituted. The owner was ordered to pay costs, and the other two persons were fined £5 and costs each.

The Board of Agriculture returns for Great Britain for the year show that there were 4,356 outbreaks and 39,277 pigs were slaughtered, having been exposed to infection.

PARASITIC MANGE.

One case of this disease in a pony was discovered. The animal was isolated until cured.

Return showing origin of Store and Breeding Pigs moved under licence into the District of the Local Authority of Blackburn

COUNTY.	Stores 1910	Breeding 1910	Total 1910	Stores 1911	Breeding 1911	Total 1911	Stores 1912	Breeding 1912	Total 1912	Stores 1913	Breeding 1913	Total 1913	Stores 1914	Breeding 1914	Total 1914
Anglesey	67	...	67	44	...	44	7	...	7	38	...	38	31	...	31
Bedfordshire	38	1	39	11	...	11	4	...	4	16	...	16	9	...	9
Buckinghamshire .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambridgeshire	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...
Cornwall .....	...	...	...	...	1	1	10	...	10	...	...	...	16	...	16
Cheshire .....	...	...	...	...	1	1	...	...	...	...	...	...	32	...	32
Essex	6	...	6	...	...	...	...	...	...	...	...	...	...	...	...
Huntingdonshire .....	...	...	...	10	...	10	...	...	...	...	...	...	20	...	20
Lincolnshire .....	...	...	...	...	...	...	...	...	...	...	...	...	16	...	16
Montgomery .....	...	...	...	51	...	51	...	...	...	...	...	...	10	...	10
Norfolk .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shropshire .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffolk .....	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Sussex .....	...	...	...	...	...	...	12	...	12	...	...	...	...	...	...
Yorkshire .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

CATTLE MARKET.

The Cattle Market has been regularly cleansed and disinfected in accordance with the provisions of the Markets and Sales Order of 1910, after each of the two markets held weekly.

Approximate number of animals exhibited for sale in the Cattle and Pig Markets :—

Year	Cattle.	Horses.	Sheep.	Pigs.
1914	6314	29	410	36

Compared with last year, this return shows an increase of 140 Cattle and 52 Sheep, and a decrease of 68 horses and 6 pigs.

The figures for the 7 preceding years are :—

Year.	Cattle.	Horses.	Sheep.	Pigs..
1913	6174	97	358	42
1912	4724	191	399	11
1911	7476	191	893	40
1910	7697	151	544	18
1909	7550	150	1851	39
1908	8010	171	2227	40
1907	8931	104	1889	31

VISITS AND INSPECTIONS.

To the Cattle and Pig Market	208
To the Railway Cattle Siding	103
To the Irish Pig Pens	61
<hr/>	
Total	372

ERNEST J. BURNDRED, M.R.C.V.S., D.V.H.,

Veterinary Inspector

THE DESTRUCTIVE INSECTS AND PESTS ACTS 1877 AND 1907,
AND THE ORDERS OF THE BOARD OF AGRICULTURE AND
FISHERIES OF 1912 AND 1914 AS REGARDS THE WART
DISEASE AND THE CORKY SCAB DISEASE OF POTATOES.

The following work was carried out in this connection.

Descriptive and illustrative posters of the Wart and Corky Scab Disease of Potatoes, have been posted in different parts of the Borough, drawing the attention of Potato Growers and the public generally to the signs and dangers of these Diseases.

There are 49 Potato Growers within the Borough, and each garden has been inspected before and after planting. Pamphlets have been distributed to growers in connection with these diseases.

One garden was found to be infected, and the necessary steps taken to prevent the spread of the disease.

AMERICAN GOOSEBERRY MILDEW (FRUIT) ORDER 1912.

Pamphlets *re* the above Disease were distributed among the Fruiterers on the Market and the Greengrocers within the Borough. Three cases of diseased gooseberries were discovered. The gooseberries were destroyed and the baskets disinfected.

WATER SUPPLY.

Blackburn has, fortunately, an excellent water supply. It is a moorland water, coming from the Brennand and Whitendale Valleys, about 20 miles from the Borough.

ANALYSIS OF WATER.

I am indebted to Dr. R. H. Pickard for the following results of typical analyses :—

TABLE LXXII.

Results of Analysis of Blackburn Water.

Samples drawn at	Tech School	Tech. School	Guide Tank	Tech. School
Date	9/3/14	18/5/14	4/7/14	9/11/14
Total Solids in Solution	4.60	7.08	4.96	5.60
Including Mineral Matter	3.68	4.05	3.16	3.72
Chlorides expressed as Chlorine	1.00	1.05	1.05	1.10
Saline Ammonia ..	0.0015	0.0016	0.0013	0.0015
Organic Ammonia	0.0850	0.0120	0.0069	0.0110
Nitrogen as Nitrites	Nil	Nil	Nil	Nil
Ditto as Nitrates	0.021	0.015	0.018	0.012
Total Hardness	1.69	1.90	2.20	2.21
Temporary Hardness ...	0.26	0.20	0.25	0.26.

All results are in parts per 100,000.

TABLE LXXIII.
Consumption of Water for the year 1914.

MONTH.	Fish Moor Reservoir.	Audley Reservoir	Guide Reservoir.	Bowland Works.	Total.
January	84,660,000	12,380,000	10,307,000	10,761,000	118,108,000
February....	73,770,000	11,290,000	9,324,000	9,717,000	104,101,000
March.....	80,090,000	12,530,000	8,083,000	10,481,000	111,184,000
April.....	80,720,000	12,300,000	9,436,000	10,694,000	113,150,000
May.....	84,880,000	7,540,000	12,328,000	19,701,000	124,449,000
June.....	83,260,000	5,570,000	9,412,000	22,253,000	120,495,000
July.....	94,210,000	6,090,000	12,612,000	23,487,000	136,399,000
August.....	77,860,000	5,280,000	12,569,000	20,812,000	116,521,000
September...	80,340,000	5,380,000	11,751,000	20,488,000	117,959,000
October.....	78,420,000	4,520,000	10,697,000	19,359,000	112,996,000
November...	67,230,000	10,270,000	8,950,000	9,875,000	96,325,000
December....	71,610,000	11,290,000	12,149,000	9,386,000	104,435,000
Total ...	957,050,000	104,440,000	127,618,000	187,014,000	1,376,122,000

Analysis of Water Consumption.

	Business by Meter.	Miscellaneous Business, Stables, Watering Streets, etc.	Domestic and Waste.	Total.
Annual Consumption.	450,220,300	165,481,875	760,419,825	1,376,122,000
Average Daily Consumption.	1,233,480	453,375	2,083,342	3,770,197
Daily Consumption per Head.	8.84	3.25	14.93	27.02

Consumption of Water from 1897.

Year.	Quantity.	Year.	Quantity.
1897	1,191,272,000	1906	1,240,443,000
1898	1,222,664,000	1907	1,231,775,000
1899	1,350,864,000	1908	1,283,057,000
1900	1,253,974,000	1909	1,281,101,000
1901	1,121,287,000	1910	1,282,860,000
1902	1,172,240,000	1911	1,308,778,000
1903	1,216,475,000	1912	1,310,994,000
1904	1,201,611,000	1913	1,389,956,000
1905	1,218,226,000	1914	1,376,122,000

HOUSE DRAINAGE.

One of the Inspectors, namely, Inspector Lees, devotes his whole time to this work, as it is found that house drains require special and continuous attention throughout the town.

During the year, 303 drains have been inspected, necessitating 481 applications of the smoke test and 443 of the water test.

In 217 instances drains were found defective at these inspections, and there were also 57 defective drains remaining over from last year's inspections to be dealt with.

In 223 instances the defects in the drains have been remedied, and thus in 51 cases the work for remedying the defective drainage had not been completed at the end of the year.

During the inspection of and testing the drains, 1,586 visits were made.

The following statement shows in detail the drainage work which has been carried out during the year 1914 :—

No. of Drains inspected	303
„ „ tested on account of Typhoid Fever ...	28
„ „ tested on account of Diphtheria	58
„ „ tested owing to complaints	85
„ „ tested at the request of owners or new tenants	31
„ „ tested owing to other causes	101
„ Letters from the Medical Officer of Health ...	111
„ Preliminary Notices served	17

No. of	Legal Notices served	3
„	Cases in which work was carried out on verbal arrangement	36
„	Visits to work in progress	1,586
„	Drains tested (a) smoke	481
„	„ (b) water	443
„	Drains examined by breaking down	188
„	„ tested for leakage with coloured solution	223
„	„ found defective	217
„	„ found not defective	86
„	„ re-laid throughout and stood the water-test	160
„	„ partly re-laid and stood the water-test (short lengths)	23
„	„ partly re-laid and stood the smoke test (short lengths)	22
„	instances of defective drains not re-laid at the end of December, 1914	51
„	Drains opened and cleansed (not re-laid)	6
„	Defective gullies replaced	190
„	New lip-diststones provided	195
„	Inspection Chambers provided	27
„	Slop-water closet drains opened and cleansed.	1
„	Down-spouts repaired	87
„	Soil-pipes replaced or repaired	3
„	Surface of yards flagged after drains re-laid..	22
„	Surface of yards repaired after drains re-laid..	106
„	Pail-closets converted to W.C.'s	32
„	Sink waste-pipes repaired	58

No. of	Useless drains removed from cellar premises..	2
„	Slop-water closets converted to pedestal wash-down closets	5
„	Privies converted to pedestal wash-down closets	0
„	Flushing apparatus repaired and new cisterns.	47
„	New wash-down pedestals provided	41
„	General repairs (doors, &c.)	11

TYPE OF SANITARY CONVENIENCES.

There can be no doubt that any form of sanitary convenience other than the fresh-water closet is extremely objectionable in a large town, and the question of the general adoption of the water-carriage system throughout the Borough is under the consideration of the Health Committee.

143 pail-closets and 13 slop-water closets have been converted to fresh-water closets during the year.

The number of the various types of sanitary conveniences in the Borough at the end of 1914 is, approximately, as follows :—

No. of	Privy Middens (fixed receptacles)	128
„	Pail and Tub Closets	9,747
„	Slop-water Closets	2,743
„	Fresh-water Closets	22,552

These figures are only approximate, but on page 181 is given the number of conveniences in connection with dwellings alone, according to an enumeration made by the Sanitary Inspectors.

SEWAGE DISPOSAL.

The following is a brief account of the method of dealing with Blackburn Sewage, for which I am indebted to Dr. R. H. Pickard :—

The larger portion of the sewage of the Borough is collected by gravitation at Witton, where it is screened and passed through catch-pits to remove the gravel and rags which have obtained access to the sewers. It then travels to Samlesbury, a distance of $4\frac{1}{2}$ miles, in duplicate cast-iron pipe syphons and brick tunnels. A portion of the sewage from the low-lying districts is now lifted into the conduits by new electrically-driven centrifugal pumps, situated at Feniscliffe Bridge. Another main conduit takes the sewage from Beardwood district to Samlesbury.

On arriving at Samlesbury, the sewage passes through a detritus tank into the septic tanks. These are two in number, and together hold six million gallons, being a dry-weather flow of about 30 hours. After septicisation, the sewage is treated with lime and sedimented in six tanks which have a total capacity of about one million gallons. The effluent from these tanks is then treated either on percolating sprinkler beds, or on double contact beds. The sprinkler beds, 19 in number and each 80 feet in diameter, are fitted with revolving distributors. They are constructed of rubble stone and filled to a depth of nine feet with broken stone and destructor clinker. The small amount of suspended matter in the effluent from the sprinkler beds is removed in five separator tanks. The sprinklers will deal with up to six million gallons of sewage per day, according to the strength of the sewage. There are 12 pairs of double contact beds, which are filled with graded stone, destructor clinker, and iron slag. A little over one million gallons of sewage per day is treated on these beds, the effluent from which passes directly into the river.

There is also ample provision for the treatment of storm-water. This passes into ten tanks which were constructed for chemical precipitation and which together hold $1\frac{3}{4}$ million gallons. After sedimentation in these, the storm-water (in excess of six million gallons per day) is either distributed over about 400 acres of farm land contoured and partially drained for broad irrigation, or treated on the contact beds, which are then used as streaming beds.

SCAVENGING.

In my report for last year stress was laid on the importance of a frequent and regular removal from the neighbourhood of dwellings of all forms of refuse.

The chief sources of danger are the large insanitary ashpit and the unsatisfactory ashtub. On account of the large size of the ashpit the tendency is to remove its contents at somewhat infrequent intervals, and its structure is such that the walls become impregnated with organic matter and are difficult to cleanse. The removal of the contents generally involves its being tipped on the back road or elsewhere previous to being placed in the scavenging cart.

The large ashtub is almost as objectionable, as the woodwork becomes saturated with filth and, on account of the weight of these large tubs, it is necessary, as in the case of the ashpit, to deposit the contents on the road or pathway before being placed in the scavenging cart.

The Health Committee have under their consideration the general conversion of these insanitary ash receptacles to portable metal covered ashbins.

The following statement represents the work carried out in this branch of sanitation during 1914, under the direction of Superintendent Marginson :—

Excreta Tubs emptied	477,117
Excreta Tubs cleansed	477,021
Ashes Tubs emptied	370,487
Dry Ashpits emptied	142,081
Wet Ashpits emptied	352

3,956 loads Dry Ashes Refuse and 84 loads Midden Refuse were tipped during the year. The increase in the number of loads of Dry Ashes Refuse tipped, as compared with 1913, is due to a large extent to the Destructors being closed down during the strike period in the early part of the year, necessitating the refuse being taken to tips. This also accounts for the decrease in the total weight of refuse destroyed at the Destructors, and the number of receptacles emptied.

The refuse during 1914 was destroyed at the following Destructors :—

	Tons.	Cwts.	Qrs
AUDLEY DESTRUCTOR :			
Dry Ashes Refuse	4,960	12	0
Midden Refuse	46	6	2
Fish and Market Refuse, Diseased Carcases, &c.	1,339	1	1
	—	—	—
Total	6,345	19	3
	—	—	—

GREENBANK DESTRUCTOR :

Dry Ashes Refuse	9,951	6	2
Midden Refuse	11	6	0
Fish and Market Refuse	52	17	2
	<hr/>	<hr/>	<hr/>
Total	10,015	10	0
	<hr/>	<hr/>	<hr/>

WENSLEY FOLD DESTRUCTOR :

Dry Ashes Refuse	9,032	18	0
Midden Refuse	4	0	2
Fish and Market Refuse	128	12	0
	<hr/>	<hr/>	<hr/>
Total	9,165	10	2
	<hr/>	<hr/>	<hr/>

STORE YARD DESTRUCTOR :

Dry Ashes Refuse—Total	1,896	7	1
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TABLE LXXIV.

Refuse Destroyed at Destructors, 1914.

Month	Dry Ashes Refuse			Midden Refuse			Fish and Market Refuse. Diseased Carcases, etc.			Totals.		
	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.
Jan.	92	12	3	...	...	...	106	1	3	198	14	2
Feb.	928	17	0	...	...	...	108	0	3	1036	17	3
Mch.	2640	10	0	...	...	...	103	16	0	2744	6	0
April	3457	1	2	19	13	2	150	13	0	3627	8	0
May	2371	9	0	10	4	2	114	2	0	2495	15	2
June	1964	5	3	2	2	2	111	15	2	2078	3	3
July	2653	6	2	...	...	...	171	3	2	2824	10	0
Aug.	1620	3	0	5	12	2	112	16	0	1738	11	2
Sept.	2634	11	1	...	...	...	155	2	0	2789	13	1
Oct.	2163	14	0	19	12	0	120	0	0	2303	6	0
Nov.	2322	1	2	2	7	0	123	18	1	2448	6	3
Dec.	2992	11	2	2	1	0	143	2	0	3137	14	2
Totals	25841	3	3	61	13	0	1520	10	3	27423	7	2

HOUSING AND TOWN PLANNING ACT, 1909.

The inspection of property under this Act has been continued, but, owing to a considerable part of the Inspector's time being devoted to a compilation of an Inventory of the chief conditions in each part of the Borough which have a direct bearing on the general health of the public, only 558 dwellings have been inspected during the year, as compared with 1,002 in 1913.

The following Tables show the work which has been carried out in connection with the Housing and Town Planning Acts by the Chief and District Inspectors.

The necessary notices were sent for the remedying of defects which could be dealt with under the Public Health Acts, and a large amount of remedial work was thus carried out during the year.

The following houses were ordered by Committee to be altered to the satisfaction of the Medical Officer of Health, or closed :—

1a, 39, Primrose Terrace—altered to satisfaction of Medical Officer of Health.

69, Birley Street—converted into lock-up shop.

12, 14, Back Blakey Street—one house closed by owner ; the other to be closed on termination of tenancy.

3, 4, 5, 6, Spring Lane—altered to satisfaction of Medical Officer of Health.

6, Gregson Lane—converted into store-room.

No. 7 No. 2 Court, Redlam—altered to satisfaction
of Medical Officer of Health.

Houses ordered to be closed :

62, Brunswick Street—closed.

43 and 45, Blakewater Street—closed.

3 and 15, Pearson Street—closed.

Houses ordered to be demolished :

8, Back Blakey Street—demolished.

14, 16, 18, Leyland Street—in abeyance

10 and 14, Larkhill—demolished.

TABLE LXXV.

Inspection of Dwellinghouses.

District... . . .	1	2	3	4	Total
Number of Houses inspected during the year of which records are kept	126	121	149	161	557
Number of Houses found satisfactory	46	18	45	36	145
Number of Houses not kept in a reasonable condition, concerning which notices have been served ...	80	101	100	93	374
Number of Houses reported for visiting by the Health Sub-Committee	...	2	4	32	38
Number of Houses in which the ordered work has not been complied with, to be followed up under Sec. 91 P.H.A. 1875	4	...	1	6	11
Number of houses in which the ordered work is completed	54	84	92	87	317
Number of Houses in which the ordered work is in course of progress, or, in hand	22	17	8	...	47
Number of Houses closed as unfit for human habitation .....	...	2	...	3	5
Number of Houses visited by the Health Sub-Committee .....	...	7	6	2	15
Number of Houses ordered to be altered to the satisfaction of M.O.H. or closed .....	...	1	10	1	12
Number of houses ordered to be demolished.....	...	...	1	3	4
Number of inspected Houses found to be overcrowded.....	0	0	0	0	0

TABLE LXXVI.

INSPECTION OF DWELLINGHOUSES.

Inspections in No. 1 District for 1914

Name of Street	Number of Houses	Number Overcrowded	Number Satisfactory	Number for which Notices have been served	Work Completed	Work in Progress	Work not done	Reported to Committee for inspection	Closed	Altered or Closed	Closed on failing to do the work	Demonstrated
Dewhurst Street	79	...	28	51	34	17	...	...	...	...	...	...
Snape Street	28	...	14	14	10	...	4	...	...	...	...	...
Bottomgate	17	...	4	13	8	5	...	...	...	...	...	...
Millbrook Street	2	...	...	2	2	...	...	...	...	...	...	...
	126	...	46	80	54	22	4	...	...	...	...	...

Inspections in No. 2 District for 1914.

Blakewater Street	2	...	...	...	...	...	...	2	...	...	...	...
Brookhouse Lane	24	...	17	7	4	3	...	...	...	...	...	...
Fort Street	28	...	...	28	28	...	...	...	...	...	...	...
Pickup Street	47	...	1	46	32	14	...	...	...	...	...	...
Larkhill	1	...	...	1	1	...	...	...	...	...	...	...
Smith Street	19	...	...	19	19	...	...	...	...	...	...	...
	121	...	18	101	84	17	...	2	2	...	...	...

Inspection in No. 3 District for 1914.

Name of Street	Number of Houses	Number Over-crowded	Number satisfactory	Number for which Notices have been served	Work Completed	Work in Progress	Work not done	Reported to Committee for Inspection	Closed	Altered or Closed	Closed on failing to do the work	Demonstrated
Witton Parade	14	...	9	5	5	...	...	...	...	...	...	...
Bowerhouse Fold	4	...	...	4	4	...	...	...	...	...	...	...
Nightingale Court ...	6	...	...	6	6	...	...	...	...	...	...	...
Winter Street	30	...	6	21	19	2	...	1	...	...	...	...
Primrose Terrace	3	...	...	3	3	...	...	3	...	3	...	...
George Street	4	...	...	4	4	...	...	...	...	...	...	...
Addison Street	4	...	...	4	4	...	...	...	...	...	...	...
Adelaide Street	16	...	4	12	12	...	...	...	...	...	...	...
Springfield Street ...	13	...	7	5	5	...	...	...	...	...	...	...
Smalley Street	31	...	18	13	12	1	1	...	...	...	...	...
Pink Street	24	...	1	23	18	5	...	...	...	...	...	...
	149	...	45	100	92	8	1	4	...	3	...	...

Inspections in No. 4 District for 1914.

Bent Street	22	...	4	15	15	...	...	3	...	...	...	...
William Henry Street	36	...	7	28	25	...	3	1	...	...	...	...
Adelaide Street	21	...	1	19	16	...	3	1	...	...	...	...
Water Street	14	...	2	12	12	...	...	...	...	...	...	...
Islington	13	...	6	6	6	...	...	1	...	...	...	...
Summer Street	12	...	9	3	3	...	...	...	...	...	...	...
Primrose Hill	26	...	...	...	...	...	...	26	...	...	...	...
Howard Street	14	...	7	7	7	...	...	...	...	...	...	...
Chatham Street	3	...	...	3	3	...	...	...	...	...	...	...
	161	...	36	93	87	...	6	32	...	...	...	...

INHABITED VANS.

These dwellings were pitched on the Market Ground, Borough Arms yard, Prince Albert yard, and the open space in Penny Street, during the Easter Fair, and on the open space at Canterbury Street at other times. No complaints were received of any annoyance or nuisance. They were frequently visited, and the general cleanliness of the vans and surroundings was again well maintained. A supply of water was provided at the Market Place and at Canterbury Street, and arrangements were made for closet accommodation and the removal of refuse. 59 vans were inspected during the year.

A case of Diphtheria was reported in one van, and immediately removed to Hospital. The van was stripped of all clothing and thoroughly sprayed with formalin.

HOUSES LET IN LODGINGS.

Six houses have been added to the register, containing 37 rooms, and accommodating 88 adults and 14 children. There are 63 of these tenements on the register, containing 267 rooms, and providing living and sleeping accommodation for 597 adults and 112 children.

Regular inspections have been made of these houses by the District Inspectors, and also frequent visits paid to them by the Chief Inspector. The bye-laws have been fairly well complied with. 2,969 visits have been paid during the year.

COMMON LODGING-HOUSES.

No house was added to or removed from the register during the year. The number of common lodging-houses is 27, accommodating 1,101 adults and 17 children. These houses have been visited frequently and regularly, 1,216 visits having been paid to them during the year, and they have been found clean and in good order.

The following is a list of the Common Lodging-houses in the Borough at the present time :—

<i>Situation of Premises.</i>	<i>No. of Rooms.</i>	<i>Accommodation.</i>
19 Larkhill Street	41	314 adults
66 Moor Street	20	92 "
3 Syke Street	8	66 "
8 Mount Pleasant	8	65 "
86 to 90 Chapel Street	7	40 "
7 and 9 Daisy Street	2	37 "
104 Mary Ann Street	5	37 " and 1 child
56 Chapel Street	6	36 "
74 Chapel Street	5	36 "
26 and 28 Penny Street	10	33 " " 9 children
54 Syke Street	6	28 " " 1 child
39 Tontine Street	4	27 "
13 Birley Street	5	25 "
59 Water Street	5	25 " " 2 children
33 Joiners Row.....	4	25 "
145 Birley Street	5	21 "
83 Moor Street	5	21 "
30 and 32 Leyland Street.....	4	20 "
1 Shorrock Street	5	18 "
13 Grimshaw Park	3	18 " " 2 children
26 Bradshaw Street.....	3	18 "
33 Larkhill Street	3	16 " " 1 child
8 Cowell Street	2	16 "
39 Nab Lane.....	3	14 "
47 " "	2	8 "
49 " "	2	12 "
15 Bent Street	3	25 "

CANAL BOATS ACTS, 1884 AND 1887.

In compliance with these Acts and with the Regulations of the Local Government Board, the Canal has been regularly visited, and 149 boats inspected during the year.

Six infringements of the Acts were detected, namely :—

- 2 Masters without Certificates.
- 2 Boats in a leaky condition.
- 1 Boat overcrowded.
- 1 Boat in a dirty condition.

Three notices have been served notifying the owners of the infringements, and the necessary work was carried out. Two boats, one not carrying a certificate, and the other overcrowded, were dealt with on verbal notice, and one master of boat with dirty cabin was cautioned.

No case of infectious disease was found, and there was no detention of boats for cleansing or disinfection.

Four new boats have been registered. Seven have been re-registered through change of owners and authorities. There are 65 boats on the register which are in use or available. 19 boats on the register have not been seen here for some time and cannot be traced.

In the 149 boats, there were met with 253 males, 52 females and 23 children. 18 of the children were under school age, and 5 of school age. 2 of these latter were on a holiday trip, 1 was attending school here, and 2 were on a trip for their health

SMOKE OBSERVATIONS.

Observations of one hour's duration are made of the various chimneys in the Borough.

The following limits have been fixed by the Town Council as to the permissible emission of black smoke :—

Chimney in connection with 1 boiler—4 minutes black smoke in the hour.

Chimney in connection with 2 boilers—5 minutes black smoke in the hour.

Chimney in connection with 3 boilers—6 minutes black smoke in the hour.

Chimney in connection with 4 or more boilers—7 minutes black smoke in the hour.

The following Table summarises the work in this connection.

Number of observations of one hour's duration ...	274
Number of occasions when limit was exceeded ...	14
Number of Notices served	12
Mechanical Stokers and other appliances provided..	4

During the year, one firm was fined 10/- and 10/- costs and ordered to abate the nuisance.

COMPLAINTS FROM THE PUBLIC.

843 formal complaints have been received from the public during the year, and 620 visits were made for the purpose of investigating the same. The great increase in the number of complaints was due to the strike in the Scavenging Department during January and February. At least 600 of these were complaints of neglect in scavenging. The most serious were visited and reported to the Scavenging Department, and considering the position in which that Department was placed during the strike, were promptly attended to.

TABLE LXXVIII.

Description of Visits.

District—	1	2	3	4	D.I.	TOTAL
Common Lodging Houses	...	235	227	663	...	1125
Houses let in Lodgings ...	433	332	332	1840	...	2937
Common Yards, Back Roads and Passages ...	2220	1758	1613	2405	...	7996
Infected Houses	320	249	327	259	...	1155
Work in Progress	772	884	792	1044	1586	5078
Inspection of Dwelling-houses	118	501	429	286	...	1334
Horse-Manure Middens	430	494	452	710	...	2086
Miscellaneous.....	105	366	64	92	...	627
Investigation of Nuisances	163	161	136	160	...	620
Smoke Observations .....	...	...	...	...	...	275
Chip Potato Shops	438	21	119	255	...	833
Fishmongers and Greengrocers.....	450	15	84	191	...	740
Schools .....	...	23	...	...	...	23
Special Review of Sanitation of Borough.	6237	5625	3496	3305	...	18663

TABLE LXXIX.

Description of Notices Issued and Nuisances Remedied.

District—	1	2	3	4	D.I.	Total
Preliminary Notices served	149	302	229	258	17	955
Legal „ „	18	16	25	44	3	106
Letters from M.O.H.... ..	3	38	9	6	111	167
Examination of Drains—						
By Water.....	...	...	...	...	442	442
„ Smoke .....	...	...	...	...	481	481
„ Coloured water for leakages.....	...	...	...	...	227	227
„ Breaking down .....	...	...	...	...	188	188
Nuisances remedied from—						
Defective Drains	2	16	18	4	205	245
Choked „	20	38	40	87	6	191
Defective Water Closets	9	23	12	6	41	91
„ Pail „	7	27	10	23	...	67
„ Slop Water Closets	2	9	3	1	1	16
„ Trapped Gullies.....	2	7	6	3	167	185
„ Sink Waste Pipes	32	20	25	21	47	125
„ W.C. Cisterns and Flushing Fittings	8	20	...	15	47	90
„ Urinals .....	...	...	...	...	...	...
„ Easing Troughs and Down Spouts.....	10	19	38	29	83	179
„ Soil Pipes .....	...	3	...	...	3	6
„ Gully Dishstones	3	8	1	4	172	188
Improper Drainage	1	4	2	3	...	10
Inspection Chambers provided.....	...	...	...	...	25	25
Sink pipes connected to drain .....	...	...	...	...	...	...
Yards unflagged	8	6	8	...	22	44
Cellars „ .....	...	7	...	...	...	7
Yards badly paved or flagged	12	18	13	17	166	166
Houses overcrowded .....	...	2	2	9	...	13
Houses, Yards, Closets, and Cellar Areas in filthy state.....	3	23	5	24	...	55
Damp and defective house walls, roofs, etc.	74	31	10	85	...	200
Defective Window Frame, Sash Cords, &c.	9	10	...	...	...	19
Insufficient Ventilation of Rooms	57	67	22	37	...	183
Defective Manure Middensteads .....	...	...	...	...	...	...
Accumulations of Manure	291	484	376	627	...	1778
„ Offensive Matter	8	27	...	4	...	39
„ Stagnant Water .....	...	...	...	1	...	1
Dwelling-houses whitewashed.....	28	51	32	158	...	269
Poultry and Erections in yards removed ...	3	...	3	...	...	6
Low Chimneys raised.....	1	...	...	2	...	3
Ash Tubs provided or repaired	18	42	54	68	...	182
Ash Pits and Pail Receptacles repaired	5	22	9	17	...	53
Street Gullies, Ash Pits, &c., reported to Cleansing Department	29	291	10	777	...	1107
Pail Closets converted to Fresh Water Closets .....	...	2	17	19	15	53
Slopwater Closets converted to Fresh Water Closets.....	...	...	...	...	5	5

INVENTORY OF THE CHIEF SANITARY CONDITIONS IN CONNECTION WITH DWELLINGS.

During the year the Inspectors devoted considerable time to compiling an inventory of the chief conditions in each part of the Borough which have a direct bearing on the general health of the public.

The following Table gives a summary of the conditions found in connection with dwellings :—

Number of houses with 1 bedroom	156	
„ „ 2 bedrooms	19,422	
„ „ 3, or more bedrooms...	11,687	
„ Ashpits	8,789	
„ Ashtubs	14,465	
„ Ashbins	2,046	
„ Pail-closets	9,115	
„ Privies	112	
„ Waste-water Closets	2,743	
„ Fresh-water Closets	18,746	
Water closets inside dwellings are not included in this figure if there is a closet outside.		
„ Common Yards—		
Flagged	198	
Flagged and Cobbled	44	
Flagged in part only	14	282
Cobbled	21	
Unpaved	5	

These particulars only refer to dwellings; they do not refer to offices, lock-up shops, workshops and factories.

The numbers of ash receptacles and sanitary conveniences therefore, which are given above, do not include those in connection with these latter premises.

Attention should be directed to the large number of ashpits and ashtubs, to which reference has also been made on page 165; also to the large proportion of pail and waste-water closets still existing.

At the inspections at least 12 per cent. of the pail closets showed evidence of the pollution of the cavity containing the pail or of the adjacent ground. The danger of this condition is evident.

The waste-water closet is also a very unsatisfactory form of closet and frequently gives rise to considerable nuisance.

The privies are chiefly situated in the outskirts of the Borough or in certain areas where a sewer is not yet available.

There are still a few common yards that require paving.

Other particulars have been obtained, such as the number and condition of horse-middensteads, private slaughter-houses, offensive trades, &c., in each district. This information will be of considerable use in connection with future sanitary reforms.

TABLE LXXX.

NORTHERN.

Generation District No.	Population.	Rate per 1000.			Deaths under 1 year per 1000 births.	Incidence per 1000 of Population.																		
		Birth Rate.	Death Rate.	Diarrhoea under 2 years.		Scarlet Fever.	Enteric Fever.	Diphtheria.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Measles.	Whooping Cough.												
...	760	...	6.6	...	7.8	...	0.0	...	0.0	...	11.8	...	0.0	...	0.0	...	1.3	...	0.0	...	0.0	...	5.2	
2	...	1772	...	14.1	...	15.2	...	0.0	...	80.0	...	6.2	...	0.0	...	0.0	...	0.0	...	0.0	...	8.4	...	7.8
3	...	1978	...	15.6	...	11.1	...	0.0	...	32.2	...	7.0	...	0.0	...	1.5	...	1.5	...	0.0	...	7.0	...	9.1
4	...	1329	...	9.0	...	14.2	...	0.0	...	83.3	...	2.2	...	0.0	...	1.5	...	0.7	...	0.7	...	4.5	...	3.0
5	...	1507	...	9.2	...	12.6	...	0.0	...	71.4	...	3.3	...	0.0	...	0.0	...	0.6	...	0.6	...	0.6	...	0.6
6	...	1163	...	19.7	...	10.3	...	0.0	...	0.0	...	5.1	...	0.8	...	0.8	...	0.8	...	0.0	...	7.7	...	6.0
7	...	996	...	12.0	...	6.0	...	0.0	...	0.0	...	4.0	...	0.0	...	0.0	...	0.0	...	0.0	...	6.0	...	5.1
8	...	575	...	12.1	...	10.4	...	0.0	...	0.0	...	5.2	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0
9	...	1810	...	22.1	...	15.4	...	0.0	...	105.0	...	3.3	...	0.0	...	0.0	...	2.2	...	0.0	...	6.0	...	2.2
10	...	738	...	13.5	...	8.1	...	0.0	...	0.0	...	5.4	...	0.0	...	0.0	...	0.0	...	0.0	...	4.0	...	1.3
11	...	1572	...	17.1	...	13.3	...	0.0	...	111.1	...	1.2	...	0.0	...	0.6	...	1.9	...	0.6	...	1.2	...	1.9
12	...	1390	...	18.0	...	10.8	...	0.7	...	80.0	...	2.1	...	0.7	...	0.0	...	0.7	...	0.0	...	3.6	...	1.4
13	...	1724	...	20.3	...	13.9	...	0.5	...	228.5	...	1.1	...	0.5	...	0.0	...	1.7	...	0.5	...	5.2	...	4.0
14	...	1445	...	18.6	...	8.3	...	0.7	...	111.1	...	1.3	...	0.0	...	0.7	...	1.3	...	1.3	...	3.4	...	3.4
15	...	2031	...	17.2	...	9.8	...	0.4	...	114.2	...	5.9	...	0.0	...	0.0	...	1.9	...	0.4	...	2.9	...	3.9
16	...	1489	...	18.8	...	16.1	...	0.6	...	0.0	...	4.7	...	0.0	...	0.0	...	0.6	...	0.6	...	4.0	...	2.6
17	...	1449	...	18.6	...	15.1	...	0.0	...	148.1	...	4.1	...	0.6	...	0.0	...	2.7	...	0.0	...	3.4	...	7.5
18	...	1400	...	17.1	...	10.0	...	0.0	...	41.6	...	1.4	...	0.0	...	0.7	...	0.0	...	0.0	...	2.8	...	0.7
19	...	1467	...	19.0	...	19.8	...	0.0	...	107.1	...	4.7	...	1.3	...	0.0	...	4.0	...	1.3	...	1.3	...	0.6
20	...	1382	...	34.0	...	19.4	...	1.4	...	127.6	...	2.9	...	0.0	...	0.7	...	4.3	...	0.0	...	8.6	...	5.0
21	...	1723	...	28.4	...	16.8	...	0.5	...	265.3	...	2.3	...	0.0	...	1.1	...	2.3	...	0.0	...	8.7	...	1.1
22	...	839	...	33.3	...	22.6	...	1.1	...	142.8	...	7.1	...	0.0	...	0.0	...	0.0	...	0.0	...	3.5	...	5.9
23	...	1249	...	27.2	...	13.6	...	0.0	...	117.6	...	7.2	...	0.0	...	1.6	...	0.8	...	0.0	...	8.0	...	0.0
24	...	1321	...	18.1	...	12.1	...	0.0	...	83.3	...	2.2	...	0.0	...	0.0	...	0.7	...	0.0	...	5.3	...	0.7
25	...	1160	...	33.6	...	14.6	...	0.0	...	128.2	...	5.1	...	1.7	...	0.0	...	0.0	...	0.8	...	6.9	...	0.8
26	...	1857	...	11.8	...	12.3	...	0.0	...	90.9	...	2.1	...	0.5	...	0.0	...	0.0	...	0.5	...	4.3	...	1.6
27	...	1476	...	20.3	...	7.4	...	0.0	...	33.3	...	4.7	...	0.0	...	0.0	...	0.0	...	0.0	...	0.6	...	3.4
28	...	1974	...	23.3	...	11.1	...	0.0	...	43.4	...	5.0	...	0.5	...	0.5	...	2.0	...	0.0	...	2.0	...	1.0
29	...	1481	...	19.5	...	10.8	...	0.0	...	68.9	...	6.7	...	0.0	...	0.6	...	0.6	...	0.6	...	5.4	...	2.7
30	...	1611	...	17.3	...	18.0	...	2.4	...	178.5	...	4.3	...	0.0	...	0.0	...	1.2	...	0.0	...	4.9	...	0.0
31	...	1353	...	17.7	...	15.5	...	0.7	...	83.3	...	9.6	...	0.0	...	0.0	...	1.4	...	0.7	...	7.4	...	1.4
32	...	1550	...	24.5	...	23.8	...	1.2	...	236.8	...	1.9	...	0.0	...	0.0	...	0.6	...	0.0	...	5.8	...	0.0
33	...	1338	...	29.8	...	22.4	...	0.0	...	175.0	...	4.4	...	0.0	...	0.0	...	1.5	...	0.0	...	6.7	...	0.7
34	...	137	...	0.0	...	14.6	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0

* The Convent, Whalley New Road.

TABLE LXXXI.

SOUTH WESTERN.

Enumeration District Number.	Population.			Rate per 1000.			Deaths under 1 year per 1000 births.	Incidence per 1000 of Population.																
				Birth Rate.	Death Rate.	Diarrhœa under 2 years.		Scarlet Fever.	Enteric Fever.	Diphtheria.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Measles.	Whooping Cough.										
1	...	978	...	17.4	...	7.1	...	0.0	...	117.6	...	3.0	...	0.0	...	2.0	...	4.1	...	0.0	...	3.0	...	0.0
2	...	1276	...	21.1	...	13.3	...	0.0	...	74.0	...	3.9	...	0.0	...	0.0	...	1.5	...	0.0	...	2.3	...	1.5
3	...	1520	...	19.0	...	13.1	...	0.0	...	68.9	...	7.2	...	0.6	...	0.0	...	1.9	...	0.0	...	7.2	...	2.6
4	...	1407	...	27.0	...	14.2	...	0.0	...	105.2	...	9.9	...	0.0	...	0.0	...	4.9	...	0.7	...	8.5	...	2.1
5	...	1567	...	41.4	...	22.9	...	0.0	...	123.0	...	5.1	...	0.6	...	0.6	...	0.0	...	1.2	...	9.5	...	2.5
6	...	1235	...	17.0	...	16.1	...	1.6	...	142.8	...	4.8	...	2.4	...	1.6	...	3.2	...	0.0	...	9.7	...	4.8
7	...	924	...	25.9	...	19.4	...	0.0	...	83.3	...	5.4	...	1.0	...	0.0	...	3.2	...	0.0	...	10.8	...	0.0
8	...	1166	...	20.5	...	10.3	...	0.0	...	41.6	...	3.4	...	0.0	...	1.7	...	0.8	...	0.8	...	6.8	...	0.8
9	...	1377	...	15.9	...	20.3	...	0.7	...	227.2	...	4.3	...	0.0	...	0.0	...	1.4	...	0.0	...	13.0	...	0.0
10	...	1047	...	21.0	...	19.1	...	0.9	...	227.2	...	2.8	...	0.0	...	0.9	...	3.8	...	0.9	...	11.4	...	3.8
11	...	1199	...	30.0	...	16.6	...	1.6	...	111.1	...	1.6	...	0.0	...	0.0	...	5.8	...	0.8	...	11.6	...	11.0
12	...	837	...	21.5	...	21.5	...	0.0	...	55.5	...	9.5	...	2.3	...	0.0	...	0.0	...	1.2	...	9.5	...	1.2
13	...	1384	...	20.9	...	25.3	...	0.0	...	137.9	...	4.3	...	0.0	...	0.0	...	1.4	...	0.7	...	15.1	...	0.7
14	...	1165	...	27.4	...	16.3	...	0.8	...	93.7	...	2.5	...	0.0	...	0.8	...	0.8	...	0.8	...	6.8	...	0.8
15	...	1175	...	32.3	...	22.1	...	0.0	...	210.5	...	11.0	...	0.0	...	0.0	...	2.5	...	0.8	...	3.4	...	0.8
16	...	974	...	23.6	...	23.6	...	0.0	...	217.3	...	10.2	...	1.0	...	1.0	...	2.0	...	1.0	...	1.0	...	2.0
17	...	1196	...	25.0	...	18.4	...	0.0	...	33.3	...	4.1	...	0.0	...	0.0	...	4.1	...	0.8	...	4.1	...	0.8
18	...	1515	...	17.1	...	16.5	...	1.3	...	115.3	...	7.9	...	0.0	...	0.0	...	2.6	...	1.3	...	3.3	...	0.6
19	...	1404	...	20.5	...	10.6	...	0.0	...	172.4	...	6.4	...	0.0	...	0.0	...	0.7	...	0.0	...	8.6	...	0.7
20	...	1025	...	11.7	...	10.7	...	0.0	...	166.6	...	2.9	...	0.0	...	0.0	...	0.0	...	0.9	...	9.7	...	0.9
21	...	1133	...	34.4	...	18.5	...	0.0	...	102.5	...	3.5	...	0.8	...	0.8	...	2.6	...	0.0	...	25.5	...	4.1
22	...	1552	...	14.1	...	7.7	...	0.0	...	0.0	...	6.4	...	0.6	...	0.0	...	0.0	...	1.9	...	2.5	...	2.5
23	...	1602	...	16.8	...	7.4	...	0.0	...	0.0	...	7.4	...	0.0	...	0.6	...	0.0	...	0.0	...	3.1	...	2.4
24	...	1939	...	27.8	...	14.9	...	0.5	...	111.1	...	4.6	...	0.0	...	0.0	...	1.0	...	0.0	...	5.6	...	0.0
25	...	2069	...	17.8	...	13.5	...	0.4	...	81.0	...	2.9	...	0.0	...	0.0	...	1.4	...	0.0	...	7.2	...	0.9
26	...	1324	...	24.1	...	18.8	...	0.7	...	218.7	...	5.2	...	0.0	...	0.0	...	0.0	...	0.0	...	9.8	...	3.7
27	...	1971	...	29.9	...	11.1	...	0.0	...	135.5	...	10.6	...	0.0	...	1.5	...	1.0	...	0.0	...	10.1	...	4.0
28	...	1982	...	21.6	...	10.0	...	0.0	...	46.5	...	11.1	...	0.0	...	0.5	...	1.5	...	0.5	...	9.5	...	1.5
29	...	1920	...	19.7	...	18.7	...	0.0	...	263.4	...	8.3	...	1.0	...	1.5	...	2.6	...	1.0	...	11.9	...	4.6
30	...	1639	...	27.4	...	15.8	...	0.0	...	88.8	...	6.7	...	0.0	...	0.0	...	0.0	...	0.0	...	8.5	...	0.0
31	...	1972	...	13.1	...	10.6	...	0.0	...	76.9	...	3.5	...	0.0	...	1.0	...	0.0	...	0.0	...	3.5	...	1.5
32	...	1727	...	19.0	...	10.4	...	0.0	...	60.6	...	9.2	...	0.0	...	0.0	...	0.0	...	0.0	...	0.5	...	0.0
33	...	1748	...	20.0	...	16.6	...	0.0	...	20.8	...	9.7	...	0.0	...	2.2	...	1.1	...	0.0	...	4.0	...	0.5

TABLE LXXXII.

SOUTH EASTERN.

Enumeration District Number.	Population.			Rate per 1000.				Deaths under 1 year per 1000 births.	Incidence per 1000 of Population.															
				Birth Rate.	Death Rate.	Diarrhoea under 2 years.	Scarlet Fever.		Enteric Fever.	Diphtheria.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Measles.	Whooping Cough.										
1	...	980	...	14.2	...	28.5	...	0.0	...	142.8	...	6.1	...	0.0	...	3.0	...	2.0	...	1.0	...	0.0	...	0.0
2	...	1095	...	30.0	...	28.3	...	1.8	...	242.4	...	8.2	...	0.0	...	0.0	...	2.7	...	2.7	...	1.8	...	0.9
3	...	1744	...	25.2	...	25.8	...	1.1	...	181.8	...	6.3	...	0.0	...	0.0	...	1.1	...	0.5	...	1.7	...	1.7
4	...	1022	...	27.3	...	33.2	...	0.9	...	71.4	...	4.8	...	0.0	...	0.9	...	8.8	...	0.9	...	1.9	...	2.9
5	...	1323	...	34.7	...	16.6	...	0.0	...	108.6	...	5.2	...	0.7	...	0.0	...	3.0	...	0.0	...	8.3	...	2.2
6	...	1824	...	23.5	...	10.9	...	0.0	...	116.2	...	10.9	...	0.0	...	0.0	...	2.1	...	0.0	...	6.5	...	2.1
7	...	1913	...	27.1	...	17.7	...	0.5	...	153.8	...	4.1	...	0.0	...	1.5	...	2.0	...	0.5	...	8.3	...	1.5
8	...	1848	...	22.1	...	17.3	...	0.5	...	121.9	...	7.5	...	0.5	...	0.0	...	1.0	...	1.0	...	7.5	...	2.1
9	...	1401	...	19.2	...	5.7	...	0.0	...	74.1	...	2.1	...	0.0	...	0.7	...	0.7	...	0.7	...	9.9	...	2.8
10	...	1498	...	22.0	...	15.3	...	0.0	...	90.9	...	4.0	...	0.0	...	0.0	...	2.6	...	0.6	...	14.0	...	3.3
11	...	1517	...	19.1	...	23.0	...	0.6	...	275.8	...	2.6	...	0.0	...	0.0	...	1.9	...	0.6	...	6.5	...	0.0
12	...	1260	...	30.1	...	12.6	...	0.8	...	131.5	...	1.5	...	0.0	...	0.0	...	0.0	...	0.8	...	9.5	...	0.0
13	...	1072	...	23.3	...	27.9	...	0.0	...	320.0	...	1.8	...	0.0	...	0.0	...	1.8	...	0.0	...	9.3	...	0.9
14	...	1855	...	21.5	...	12.4	...	0.0	...	50.0	...	4.3	...	0.0	...	1.0	...	0.0	...	0.0	...	9.7	...	0.5
15	...	1207	...	19.8	...	19.0	...	0.0	...	208.3	...	9.1	...	0.8	...	0.0	...	0.8	...	0.0	...	9.1	...	1.6
16	...	1899	...	23.7	...	14.7	...	1.0	...	133.3	...	2.1	...	0.0	...	0.0	...	3.1	...	0.0	...	6.8	...	0.0
17	...	1678	...	16.6	...	9.5	...	0.0	...	71.4	...	2.3	...	0.0	...	0.0	...	1.1	...	0.0	...	7.1	...	1.1
18	...	557	...	17.9	...	17.9	...	0.0	...	100.0	...	16.1	...	0.0	...	0.0	...	1.7	...	0.0	...	12.5	...	0.0
19	...	1948	...	10.2	...	11.2	...	0.0	...	200.0	...	2.5	...	0.0	...	1.5	...	0.5	...	0.0	...	7.7	...	1.0
20	...	1929	...	28.5	...	21.7	...	1.0	...	109.0	...	12.9	...	1.0	...	0.0	...	0.5	...	0.5	...	6.7	...	1.5
21	...	1912	...	9.4	...	8.8	...	0.5	...	111.1	...	7.8	...	0.0	...	0.0	...	0.5	...	0.0	...	11.5	...	2.6
22	...	1875	...	21.3	...	13.3	...	1.0	...	125.0	...	3.2	...	0.0	...	0.0	...	2.1	...	0.0	...	2.6	...	1.6
23	...	946	...	12.6	...	10.5	...	0.0	...	83.3	...	2.1	...	0.0	...	1.0	...	3.1	...	0.0	...	8.4	...	0.0
24	...	1343	...	26.0	...	13.4	...	0.0	...	0.0	...	9.6	...	0.7	...	0.0	...	1.4	...	0.0	...	18.3	...	4.4
25	...	924	...	20.5	...	11.9	...	0.0	...	52.6	...	4.3	...	2.1	...	0.0	...	4.3	...	0.0	...	6.4	...	0.0
26	...	900	...	18.8	...	7.7	...	0.0	...	0.0	...	5.5	...	0.0	...	4.4	...	1.1	...	0.0	...	0.0	...	0.0
27	...	1051	...	22.8	...	19.9	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0	...	4.7	...	9.5	...	0.0	...	0.0
28	...	163	...	0.0	...	0.0	...	0.0	...	0.0	...	0.6	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0	...	0.0
29	...	83	...	0.0	...	0.0	...	0.0	...	0.0	...	36.1	...	0.0	...	36.1	...	36.1	...	0.0	...	0.0	...	0.0
30	...	290	...	0.0	...	55.1	...	0.0	...	0.0	...	3.4	...	0.0	...	0.0	...	10.3	...	3.4	...	0.0	...	0.0

* Blackburn Union Workhouse.

† Blackburn and East Lancashire Royal Infirmary.

‡ Blackburn Fever Hospital.

§ Model Lodging House, Larkhill Street.



STATISTICS OF VARIOUS ENUMERATION DISTRICTS.

The area of each of the Enumeration Districts mentioned below is described in the Annual Report for the year 1913.

The figures in this Table, especially when they have been completed for several years, will help to call attention to special districts in the Borough where the death-rates and the prevalence of disease are excessive.

METEOROLOGICAL OBSERVATIONS.

The Meteorological Station is situated on an open site in the Corporation Park.

Daily readings of each instrument are taken at 9 a.m. These instruments are :—

- 1.—Maximum Thermometer (Phillips's).
- 2.—Minimum Thermometer (Rutherford's).
- 3.—Hygrometer.
- 4 & 5.—Black and Bright Bulb Thermometers for Solar Radiation.
- 6.—Spirit Thermometer for Terrestrial Radiation.
- 7 & 8.—1ft. and 4ft. Earth Thermometers.
- 9.—Rain Gauge.
- 10.—Anemometer.
- 11.—Sunshine Recorder.
- 12.—Barometer (Fortin), kept at the Health Office.

A full description of the above instruments appeared in the Annual Report for 1903.

The total rainfall during 1914 was 45.932 inches, compared with 40.337 inches during 1913.

During 1914, rain fell on 237 days, compared with 227 days during 1913.

The wettest months of 1914 were November, December, March, July, and September, when there were 6.577, 5.784, 4.916, 4.874, and 4.824 inches of rainfall respectively.

The highest reading of the 4ft. Thermometer during 1914 occurred on August 28th and September 3rd, 4th, 5th, 6th, and 9th, namely, 56.8 degrees Fahrenheit. The highest reading during 1913 was 55.6 degrees Fahrenheit, on August 6th and 7th, and September 2nd to 8th.

During 1914 there were 84 days without any bright sunshine, compared with 94 days during 1913.

The total amount of bright sunshine during 1914 was 1,320 hours 4 minutes, compared with 1,158 hours 43 minutes during 1913.

SUMMARY OF THE METEOROLOGICAL REPORT FOR 1914.

- Mean monthly reading of the Barometer—29.916"
- Highest daily reading of the Barometer—30.657"
on January 13th.
- Lowest daily reading of the Barometer—28.806"
on December 14th.
- Highest reading of the Maximum Thermometer—79° 0
on July 21st and August 14th.
- Lowest reading of the Minimum Thermometer—22° 5
on January 1st.
- Total rainfall during the year—45.932 inches.
- Number of days during the year on which rain fell—237.
Four days of which the fall was less than .005 of an inch.
- The greatest number of days on which rain fell in one month—
30, in March.
- The highest reading of the 4ft. Thermometer during the
year—56° 8 on August 28th and September 3rd, 4th,
5th, 6th and 9th.
- The greatest amount of bright sunshine in one month—
204 hours, 40 minutes, in June.
- The least amount of bright sunshine in one month—
23 hours, 50 minutes, in January.
- Number of days during the year without any bright sun-
shine—84.

SUMMARY OF WIND RECORDS.

For the Year 1914.

Number of days during the year on which the prevailing
wind was—

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
6	10	29	38	84	71	118	9	33

The total number of miles registered by Anemometer
during the year was—61,238.

The greatest number of miles registered during one day
was—673 on December 4th.

The least number of miles registered during one day
was—10 on October 17th.

Table LXXXIII.—Meteorological Report for the Year 1914.

1914	Mean Pressure		Mean Relative Humidity.	Mean of Maximum and Minimum Temperature.	Mean Temperature at 9 a.m. Readings	Under-ground Temperature		Mean Black Bulb in Vacuo.	Mean Bright Bulb in Vacuo.	Absolute extremes of Temperature.			Mean daily minimum on the grass.	Mean depression of minimum on grass below minimum in the shade.	Total bright sunshine.	Most sunshine in one day.		Direction of the Wind.						Mean daily movement of wind.	Total rainfall.			
	Station Level.	Sea Level.				at 1 ft.	at 4 ft			Highest.	Lowest	Date.				Am't.	Date	N.E.	E.	S.E.	S.	S.W.	N.W.					
	inches	%	deg.	deg.	deg.	deg.	deg.	deg.	deg.	deg.	deg.	deg.	hrs. min.	hrs. min.	Miles.	Inchs.												
January	29.760	30.140	87.6	37.30	37.6	35.1	42.1	50.4	43.2	51.3	31st	22.5	1st	28.5	4.9	23—50	5—50	6th	0	1	7	3	3	5	11	1	200.1	3.454
February	29.300	29.680	85.9	42.60	42.0	41.7	42.9	70.2	53.3	53.0	1st 3rd 14th	27.0	25th	32.5	5.3	55—9	5—40	11th	0	0	1	1	7	15	4	0	283.7	2.859
March ...	29.186	29.602	88.2	41.00	40.8	41.4	42.1	78.7	55.9	57.5	30th	28.5	10th 20th	31.2	4.8	82—20	7—0	27th	1	1	2	2	3	7	13	2	187.3	4.916
April	29.662	30.035	74.7	48.05	50.2	56.4	45.0	95.8	68.3	68.3	21st	32.0	15th	34.2	6.5	193—20	12—30	27th	3	0	1	2	8	1	14	1	178.0	1.490
May	29.713	30.090	81.8	48.40	49.6	50.3	48.5	99.2	69.5	66.0	17th	34.0	26th	37.5	4.8	138—17	12—15	27th	0	3	1	1	8	4	13	1	123.4	2.273
June	29.724	30.078	74.8	56.65	57.6	56.1	52.3	106.4	77.8	75.0	30th	37.2	8th	42.9	5.2	204—40	14—5	14th	1	1	5	4	3	2	12	2	112.2	2.793
July	29.521	29.864	76.5	58.50	59.9	58.8	55.8	106.0	78.0	79.0	21st	45.0	4th	47.5	4.4	138—55	13—35	4th	0	1	0	1	8	8	13	0	119.2	4.874
August ...	29.648	29.988	77.9	58.90	60.5	57.8	56.1	107.1	78.4	79.0	14th	46.8	5th 12th	43.9	7.8	171—43	12—5	12th 14th	0	0	2	4	11	5	8	1	116.1	3.635
September	29.687	30.048	75.7	54.35	55.8	55.2	55.7	101.2	72.6	73.0	2nd 3rd	36.5	21st	41.1	6.0	167—43	10—20	6th	0	2	1	7	5	3	12	0	145.8	4.824
October ...	29.679	30.053	87.3	49.45	49.4	50.8	52.4	80.4	61.5	60.5	2nd	37.0	24th	40.5	4.4	61—5	6—25	7th	1	0	2	7	13	3	4	1	118.8	2.453
November	29.480	29.870	86.7	43.05	43.9	44.3	48.4	65.1	51.1	55.0	30th	28.7	21st	33.7	4.7	57—7	7—10	16th	0	1	7	2	4	5	11	0	202.0	6.577
December	29.150	29.544	88.9	38.55	38.6	40.1	44.4	53.8	44.1	50.2	2nd 29.2	29.2	23rd	29.9	4.8	25—55	4—45	16th	0	0	0	4	11	13	3	0	236.5	5.784

TABLE LXXXI.—TOTAL AMOUNT OF BRIGHT SUNSHINE RECORDED ON EACH DAY DURING 1913.

MONTH.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total for each Month.
	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
January	0 0	1 40	0 15	0 0	0 0	0 30	0 10	0 35	2 50	0 30	0 0	0 0	0 0	0 0	1 30	1 30	0 0	0 0	0 0	0 0	0 45	0 0	0 0	0 25	3 0	1 30	0 0	0 0	0 0	0 0	2 45	17 55
February.....	2 15	0 0	0 0	0 0	0 20	0 0	0 0	4 30	0 0	0 0	1 30	3 30	3 45	0 0	0 0	5 20	0 0	6 30	6 0	0 20	5 20	6 0	1 40	2 0	3 0	0 15	1 0	0 0	.....	.....	.....	53 15
March.....	0 0	4 40	0 0	1 30	5 0	2 20	4 45	6 15	0 0	5 45	5 0	6 30	2 5	0 0	4 30	3 0	3 30	4 5	2 45	1 45	4 20	0 20	0 15	4 0	6 25	1 25	0 0	0 0	5 40	0 35	5 30	91 55
April	4 0	3 30	7 40	3 40	8 45	2 15	4 0	3 55	0 45	0 15	0 0	5 20	4 15	0 0	1 15	3 45	4 45	3 15	1 10	11 10	0 5	2 15	1 30	6 40	2 15	1 10	0 40	1 15	0 40	3 10	.....	93 20
May.....	1 0	8 45	0 10	0 30	1 30	0 0	6 45	0 0	1 15	8 20	7 0	2 0	1 50	5 55	12 15	12 10	4 45	10 0	6 0	0 30	2 45	0 25	0 0	3 15	9 0	12 10	7 10	0 35	0 0	12 0	3 0	141 0
June.....	13 20	10 30	13 10	6 50	3 0	0 0	9 40	7 5	0 0	7 35	2 10	13 10	0 0	1 50	12 20	11 5	1 40	3 50	1 10	3 0	3 30	0 20	0 40	0 0	5 25	2 35	9 20	0 0	1 30	3 50	.....	148 35
July.....	10 0	1 0	0 45	0 0	2 0	1 15	3 40	6 45	0 0	2 0	4 15	1 30	2 40	4 50	6 55	3 10	0 0	4 0	6 20	10 30	0 0	4 30	9 30	7 15	7 30	13 15	12 20	11 15	7 15	8 0	9 30	161 55
August	3 20	9 15	9 35	5 20	4 45	5 15	6 20	10 5	4 45	4 10	1 40	5 30	0 0	0 0	0 0	5 30	0 0	12 0	11 30	10 25	1 10	0 0	8 45	9 0	9 20	9 20	1 30	8 0	7 20	5 0	1 50	170 40
September	0 0	4 0	9 10	5 15	1 25	10 45	6 30	5 10	1 30	6 10	6 40	2 35	1 30	4 30	7 30	5 40	1 25	1 0	4 15	0 0	6 40	0 0	0 0	6 5	0 55	0 20	0 0	8 20	8 30	4 50	.....	120 40
October	6 30	0 0	3 10	0 35	0 0	0 0	0 0	2 15	3 45	4 30	0 0	3 50	0 30	0 0	1 15	3 0	6 15	1 0	6 10	2 3	1 15	6 50	3 40	4 5	3 30	0 0	1 40	3 15	5 35	4 15	6 35	85 28
November	4 15	1 20	1 0	4 35	2 0	0 5	5 20	0 0	4 30	0 0	0 45	1 15	0 40	4 15	1 30	0 0	0 0	0 20	1 50	0 0	0 0	4 25	4 10	0 40	0 0	1 30	0 0	0 0	0 45	0 15	.....	45 25
December	4 35	0 0	0 0	0 45	4 40	0 0	0 0	0 0	0 0	0 0	0 0	0 35	0 40	0 0	0 0	0 0	1 30	0 0	0 0	0 0	2 0	0 0	0 0	4 15	0 0	0 0	0 20	4 0	1 45	3 30	0 0	28 35

TABLE LXXXII. TOTAL AMOUNT OF BRIGHT SUNSHINE RECORDED ON EACH DAY DURING 1914.

MONTH.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total for each Month.
	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
January	0 0	0 0	0 0	0 0	2 0	5 50	0 0	0 0	0 0	0 0	4 20	0 0	0 0	1 20	0 0	0 0	0 0	0 0	0 0	0 40	0 0	0 0	3 50	0 0	0 0	5 0	0 10	0 20	0 0	0 20	0 0	23 50
February	0 0	0 0	0 0	0 0	4 45	1 40	1 10	2 30	0 20	3 50	5 40	3 45	1 35	0 10	1 30	1 20	0 35	3 10	0 30	1 10	5 10	5 15	4 20	0 30	5 20	0 0	1 30	0 0	.....	.....	.....	55 9
March	4 25	2 40	0 0	0 0	0 0	1 40	2 0	0 0	0 10	6 10	6 30	5 45	0 0	6 5	0 45	3 40	3 0	3 30	3 45	2 15	4 0	4 30	0 30	1 0	0 30	4 15	7 0	3 25	0 0	4 50	0 0	82 20
April	4 20	5 25	5 25	0 35	0 15	2 55	6 30	1 45	0 0	5 0	6 0	8 35	2 15	8 20	11 10	6 45	11 45	11 50	11 50	11 0	9 45	7 0	9 50	0 0	5 0	9 40	12 30	10 0	4 15	3 40	.....	193 20
May	2 32	11 50	0 30	2 15	3 45	1 10	0 0	3 35	2 10	0 0	7 50	9 50	0 5	2 30	6 50	8 30	11 10	11 5	0 40	2 10	2 15	3 45	0 0	5 0	8 10	6 40	12 15	2 35	0 0	6 30	2 40	138 17
June.....	6 35	0 0	13 20	6 40	0 0	1 10	6 15	1 50	0 10	9 20	10 45	1 10	11 45	14 5	14 0	11 20	7 45	4 25	13 0	9 20	3 0	3 45	8 15	2 15	9 15	9 10	5 5	7 30	0 0	13 30	.....	204 40
July.....	7 45	3 20	0 40	13 35	0 5	1 20	8 10	2 5	8 30	12 15	11 30	0 20	5 50	0 15	7 35	0 15	0 0	1 55	1 50	9 0	11 5	6 10	0 0	4 55	0 35	2 50	6 35	4 0	1 20	3 40	1 30	138 55
August	0 50	2 45	10 40	5 38	10 10	0 30	6 25	0 0	0 20	11 5	9 15	12 5	11 40	12 5	8 15	12 0	11 35	4 45	4 0	2 0	5 25	3 10	4 10	1 45	6 35	5 30	11 35	1 30	0 0	0 30	1 30	171 43
September	8 30	8 30	9 45	8 15	5 30	10 20	5 5	3 35	0 20	3 40	1 20	1 15	4 27	3 15	6 30	0 40	3 18	6 0	7 50	7 48	8 0	6 35	7 5	7 15	8 55	0 0	7 25	0 15	9 10	7 10	.....	167 43
October	0 45	4 30	2 40	5 0	0 0	1 55	6 25	0 0	5 30	2 10	3 0	0 0	0 0	0 45	0 40	0 0	0 0	0 15	0 0	1 50	1 30	0 20	4 15	1 30	0 0	3 0	4 45	2 45	5 15	2 20	0 0	61 5
November	5 45	0 45	3 20	0 0	0 40	0 0	4 10	0 0	0 0	4 50	0 0	1 17	1 10	6 35	0 0	7 10	6 40	3 0	0 0	1 30	5 10	0 0	2 0	0 0	0 0	0 0	0 5	0 45	0 0	0 45	.....	57 7
December	1 50	0 0	1 55	0 0	0 30	0 0	1 0	0 45	0 0	0 0	0 0	0 15	0 0	0 0	0 0	4 45	0 0	3 5	0 0	3 5	0 0	2 20	0 55	0 45	0 0	1 30	0 0	0 15	1 20	0 0	1 40	25 55

Causes of Death in the County Borough of Blackburn during the Year 1914.

AGIS.

[illegible]

[illegible]

[illegible]

[illegible]

CAUSE OF DEATH.

AGES.

CAUSE OF DEATH.	All Ages															Total		
	0 to 1	1 to 2	2 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and upwards		M	F
183 Homicide by Cutting or Piercing Instruments .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
184 Homicide by other means .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
185 Fractures (cause not specified) .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	I	..	..	I	..
186 Other Violence .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
187 Dropsy	I	..	..	..	I	..	..	..	..	..	..	..	..	..	..	I	I	2
188 (a) Syncope (aged 1 year and under 70) .. .. .	..	..	..	..	..	..	..	..	..	..	..	I	..	..	..	..	I	..
(b) Sudden Death (not otherwise defined) .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
189 (a) Heart Failure (aged 1 year & under 70) .. .. .	..	..	I	I	..	I	I	4	4	7	2	11	7	..	..	24	15	39
(b) Atrophy, Debility, Marasmus (aged 1 year and under 70) .. .. .	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	I	2	3
(c) Teething	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	5
(d) Pyrexia .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(e) Other ill-defined deaths .. .. .	..	..	..	2	..	..	..	..	..	..	..	..	..	I	..	I	2	3
f) Cause not specified .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	326	83	68	43	30	37	46	115	155	263	160	186	313	153	18	1003	1003	006

LOCAL GOVERNMENT BOARD.

TABLE I. -Vital Statistics of Whole District during 1914 and Previous Years.

Name of District: BLACKBURN.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.†		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number.	Nett.		Number. #	Rate.	of Non-residents registered in the District. †	of Residents not registered in the District. †	Under 1 Year of Age.		At all Ages.	
			Number. †	Rate.					Number. #	Rate per 1,000 Natl Births.	Number. #	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	132373	3139		23.7	2353	17.6	127	28	400	127.4	2234	16.8
1910	132760	2948		22.2	2075	15.6	159	33	401	136.0	1949	14.6
1911	133149	2857		21.4	2242	16.8	123	30	534	186.9	2149	16.1
1912	133539	2741	2737	20.4	1988	14.8	118	58	327	119.4	1928	14.4
1913	133931	2923	2915	21.7	2205	16.4	147	61	431	147.8	2119	15.8
1914	134323	2814	2805	20.8	2080	15.4	141	67	326	116.2	2006	14.9

NOTES.—This Table is arranged to show the gross births and deaths in the district, and the births and deaths properly belonging to it, with the corresponding rates. For years before 1911 some of the corrected rates probably will not be available. The rates should be calculated per 1,000 of the estimated gross population. In a district in which large Public Institutions for the sick or infirm seriously affect the statistics, the rates in Columns 5 and 13 may be calculated on a nett population, obtained by deducting from the estimated gross population the average number of inmates not belonging to the district in such institutions.

* In Column 6 are to be included the whole of the deaths registered during the year as having actually occurred within the district.

In Column 12 is to be entered the number in Column 6, corrected by subtraction of the number in Column 8 and by addition of the number in column 9. Deaths in Column 10 are to be similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

† The Medical Officer of Health will be able from the returns made to him by the local Registrar of Deaths, as well as from the quarterly lists furnished by the Registrar General, to fill in Column 8 in accordance with the rule in the next paragraph below. The Registrar General, either directly or through the County Medical Officer of Health, will supply the Medical Officer of Health with the particulars of deaths to be entered in Column 9; and all such deaths must be included in this Column, unless an error is detected, and its correction has been accepted by the Registrar General. For Column 4 the Registrar General will furnish to the Medical Officer of Health, a statement of the number of births needing to be added to or subtracted from the total supplied by the local Registrar.

‡ “Transferable Deaths” are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided. The deaths of persons without fixed or usual residence, e.g., casuals, must not be included in Columns 8 or 9, except in certain instances under 3 (b) below. The Medical Officer of Health will state in Column 8 the number of transferable deaths of “non-residents” which are to be deducted, and will state in Column 9 the number of deaths of “residents” registered outside the district which are to be added in calculating the nett death-rate of his district.

The following special cases arise as to Transferable Deaths:—

(1) Persons dying in Institutions for sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) must be regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an Institution had no fixed residence at the time of admission, the death is not transferable. If the patient has been directly transferred from one such Institution to another, the death is transferable to the district of residence at the time of admission to the first Institution.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement should be referred to the district of fixed or usual residence of the parent.

(3) Deaths from Violence are to be referred (a) to the district of residence, under the general rule; (b) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known; (c) failing this, to the district where death occurred, if known; and (d) failing this, to the district where the body was found.

Area of District in acres
(land and inland water) } 7418

Total population at all ages 133,052
Number of inhabited houses..... 30,648
Average number of persons per house 4.3

At Census of 1911.

AGES.

All Ages

Total

85

75

65

55

45

35

25

15

5

0

TABLE III. Causes of, and Ages at Death during the Year 1914.

Name of District: BLACKBURN.

(See Notes at Back.)

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents," whether occurring within or without the District (a).										Total Deaths whether of "Residents" or "non-Residents" in the District (b).
	All Ages.	Under 1 year	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.		
										2		3	4	5	6	7	8	9	10
All causes } Certified (c) ... Uncertified ...	1974	316	82	68	73	83	269	602	481	446	
	32	10	1	...	...	...	1	7	13	1
Enteric Fever ...	7	...	...	...	...	2	3	...	2	3
Small Pox ...	...	...	...	...	...	...	...	...	...	...
Measles ...	20	5	11	3	1	...	...	...	...	1
Scarlet Fever ...	10	...	...	6	4	...	...	...	...	7
Whooping Cough ...	9	6	1	2	...	...	...	...	...	...
Diphtheria and Croup ...	7	1	1	4	1	...	...	...	...	1
Influenza ...	24	...	1	1	...	...	6	11	5	5
Erysipelas ...	3	2	...	...	...	...	1	...	...	...
Phthisis (Pulmonary Tuberculosis)	124	1	2	3	7	22	62	26	1	36	
Tuberculous Meningitis ...	12	...	1	4	7	...	...	...	...	4
Other Tuberculous Diseases ...	20	4	1	2	3	3	3	1	3	6	
Cancer, malignant disease ...	134	...	...	...	...	...	19	68	47	35
Rheumatic Fever ...	5	...	...	...	1	1	1	2	...	1
Meningitis (See note d) ...	24	2	3	7	7	3	...	2	...	3	
Organic Heart Disease ...	256	2	...	...	6	11	25	118	94	73
Bronchitis ...	246	38	11	7	3	2	14	80	91	41	
Pneumonia (all forms) ...	192	29	30	14	10	8	22	47	32	19	
Other diseases of Respiratory organs ...	18	1	...	...	1	...	6	9	1	5
Diarrhoea and Enteritis. (See note e) ...	60	36	7	3	1	...	4	6	3	4	
Appendicitis and Typhlitis ...	12	...	1	1	3	2	4	1	...	16	
Cirrhosis of Liver ...	10	...	...	...	...	...	1	8	1	1
Alcoholism ...	3	...	...	...	...	...	1	2	...	...
Nephritis and Bright's Disease ...	82	...	...	...	1	4	15	33	29	14
Puerperal Fever ...	6	...	...	...	...	4	2	...	...	3
Other accidents and diseases of Pregnancy and Parturition ...	12	...	..	...	...	3	9	...	...	2
Congenital Debility and Malformation, including Premature Birth ...	137	134	3	...	...	...	...	...	...	16
Violent Deaths, excluding Suicide	45	8	3	6	5	1	5	12	5	24	
Suicides ...	27	...	...	...	...	1	10	12	4	3
Other Defined Diseases ...	451	54	4	4	8	14	49	150	168	116	
Diseases ill-defined or unknown...	50	3	3	1	4	2	8	21	8	8	
Totals ...	2006	326	83	68	73	83	270	609	494	447	
Sub-ENTRIES included in above Figures:—											
Cerebro-spinal Meningitis ...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis ...	...	...	..	...	..	...	...	...	...	...

NOTES TO TABLE III.

- (a) All "Transferable Deaths" of residents, *i.e.*, of persons resident in the District who have died outside it, are to be *included* with the other deaths in columns 2-10. Transferable deaths of non-residents, *i.e.*, of persons resident elsewhere in England and Wales who died in the District, are in like manner to be *excluded* from these columns. For the precise meaning of the term "transferable deaths" *see* footnote to Table I.

The total deaths in column 2 of Table III. should equal the figures for the year in column 12 of Table I.

- (b) All deaths occurring in institutions for the sick and infirm situated within the district, whether of residents or of non-residents, are to be entered in the last column of Table III.

- (c) All deaths certified by registered Medical Practitioners and all Inquest cases are to be classed as "Certified"; all other deaths are to be regarded as "Uncertified."

- (d) Exclusive of "Tuberculous Meningitis" (10), but inclusive of Cerebro-spinal Meningitis.

- (e) Title 19 should be used for deaths from Diarrhoea and Enteritis at all ages. (In the "Short List" deaths from Diarrhoea and Enteritis under 2 years are included under Title 19; those at 2 years and over being placed under Title 28.)

NOTES TO TABLE III.

APPENDIX C.

[illegible]